Notebook PC

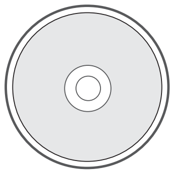
Drivers and Utilities

User's Manual

E1703 / Oct 2004

Table of Contents

Support CD for Windows



The Notebook PC you purchased may or may not be preloaded with an operating system. The support CD included with this Notebook PC provides all the necessary drivers and utilities in order for you to use your Notebook PC with Microsoft® Windows® XP (referred to as "Windows" in this User's Manual).

The levels of hardware and software support may vary depending on the installed operating system. Operating systems not pre-installed on this Notebook PC may produce different results than the ones described in the provided user's manuals.

If your Notebook PC is not preloaded with any operating system, or you want to install another operating system other than the preloaded one, the following pages will give step-by-step installation procedures for typical system configurations under the Windows® operating system. For application usage, please see the online help provided with each of the applications after installation. The following are contents of a typical support CD. Variations may be found for each territory or language. If the autorun menu does not appear, double clicking the CD-ROM disc drive icon in "My Computer" (may be the (D:) drive or (E:) drive on hard drives with two partitions) or running SETUP.EXE (through Start menu "Run...") located in the root of the support CD, will bring up the autorun menu.

New Windows Installation

If you install a new operating system on your Notebook PC, there will be many hardware devices without drivers. Use the provided support CD to correct this problem.

Drivers for Windows

Next page gives descriptions of each support CD item. Due to ongoing improvements in the support CD, there may be some differences between this User's Manual and your support CD. The names in quotations are the actual driver names displayed in the System Properties of MS Windows. Windows cannot contain all the device drivers from every manufacturer, with every update; therefore the provided support CD will contain the best driver for your built-in devices and should be used in place of any Windows default drivers.

Drivers

Some drivers may already be provided in Windows. If you have any problems with these drivers, visit the Microsoft Windows Update site. A link is provided in Microsoft Windows Explorer under “Tools.” The exact controller and driver will vary by model and territory.

VGA (Display) “ATI MOBILITY RADEON 9200” or “ATI MOBILITY RADEON 9200”Driver

Installing the VGA driver first will make viewing other setup screens much easier. This installs display drivers for your operating system in order to properly use the Notebook PC’s built-in graphics controller and to provide optimal display features. Once the display driver is installed, you can change your display’s resolution and color through Display Properties.

This device is shown under Windows Device Manager “**Display adapters**.”

ATKACPI “ATK0100 ACPI UTILITY” Utility

This utility is required for special utilities provided in the support CD. This installs drivers for the Notebook PC’s Advanced Configuration and Power Interface (ACPI) for features utilizing power management functions.

This device is shown under Windows Device Manager “**System devices**.”

SiS USB WLAN “ASUS 802.11b Network Adapter” (Depends on model)

Required on models with internal wireless LAN. Installs the required network driver for the Notebook PC’s optional internal wireless LAN controller. If you purchased the optional internal wireless LAN, you need to install this driver. If you did not purchase the optional internal wireless LAN, you cannot install this driver.

This device is shown under Windows Device Manager “**Network Adapters**.”

Audio “NVIDIA(R) nForce(TM) Audio Codec Interface” Driver

This installs audio drivers for your operating system in order to properly use the Notebook PC’s built-in sound controller. All audio functions are configured through Windows and help can be located within Windows documentation or Windows help files.

This device is shown under Windows Device Manager “**Sound, video and game controllers**.”

CPU HotFix Central Processor Driver

This installs Windows support files for advanced features in the new processor used in this Notebook PC.

INF Update

This installs Windows support files for advanced features in new chipsets.

LAN “Marvell Yukon Gigabit Ethernet 10/100/1000Base-T” Driver

Installs the required LAN driver for the Notebook PC’s built-in PCI Fast-Ethernet controller. Fast-Ethernet supports both 10 Base-T or 100 Base-TX networks at half or full duplex.

This device is shown under Windows Device Manager “**Network Adapters**.”

Modem “AC97 SoftV92 Data Fax Modem with SmartCP” Driver

Installs the necessary driver in order for your operating system to have the correct files for the Notebook PC with built-in modem and drivers for integration with the internal audio. With third-party software, fax and speaker phone capabilities are possible using this Notebook PC.

RICOH Media Driver “Ricoh SD Bus Host Adapter” & “Ricoh Memory Stick Bus Host Adapter”

A version of this driver is provided by Microsoft in its Windows XP operating system. The support CD includes this driver called for added enhancements for Windows XP and other Windows versions.

GameFace ASUS Enhanced Display Driver (on selected models)

Installs **GameFace** driver. GameFace lets you talk to and see your friend on the remote computer (video conferencing) even when you are playing a full-screen game.

Utilities

AMD PowerNow Utility (on selected models)

Installs AMD PowerNow utility to actively adjust CPU power and performance to maximize battery time when you are not using an AC adapter.

Check Mail Utility

Installs **Check Mail** utility to monitor and notify you of incoming email messages waiting in your Microsoft® Outlook or Outlook Express Inbox. (This utility may or may not be compatible with other email applications.)

Hotkey Utility

Installs **Hotkey** utility. Hotkey utility is a program designed to intercept key strokes so that key assignments can be made to run a program or script. This program cannot be used to change default keys or key combinations used by other software, operating systems, or by the Notebook PC’s hardware.

LiveUpdate Utility

This utility helps you easily upgrade your Notebook PC’s BIOS through an Internet connection.

PC-cillin 2002 Utility

Installs **Trend’s PC-cillin 2002**, a world-class antivirus protection software for the new Internet era, to keep your PC virus-free. This very powerful antivirus software is bundled with each Notebook PC to protect your investment. As software become more and more a part of our daily lives, measures have to be taken to protect them. You may skip this software if you have your own antivirus software.

PowerGear Utility

PowerGear is a custom utility designed for this Notebook PC that allows you to use predefined or user defined values for multi-selectable power saving modes or “gears”. You can “shift” between the “gears” using the taskbar icon or the keys above the keyboard.

Probe2 Utility

Installs **Probe2** utility to monitor the Notebook PC’s CPU temperature and other resources. This is an optional software to help you better manage your Notebook PC’s resources.

TouchPad “Synaptics PS/2 TouchPad” Utility

Shown under Windows “**Mice and other pointing devices**.” Installs “**Synaptics® TouchPad**” utility. The Notebook PC already supports built-in or externally connected keyboard and PS/2 mouse devices. However, the provided device driver will provide enhancements and features to the TouchPad to increase the functionality of the TouchPad. For detailed information, see the Software Reference in the next section. To access help, right-click the TouchPad icon on the taskbar and select Help.

WinFlash Utility

Installs a BIOS update utility for Windows so that you can conveniently update your Notebook PC’s BIOS without having to restart your Notebook PC in DOS mode.

GameFace Utility (on selected models)

Installs **GameFace** utility. GameFace lets you talk to and see your friend on the remote computer (video conferencing) even when you are playing a full-screen game. Requires “ASUS Enhanced Display Driver.”

Other Support CD items

[Read Me] Text File

Gives you notes concerning this support CD or the Notebook PC.

[Browse this CD] Link

Shows you the contents of this support CD using Windows Explorer.

[Technical Support Form] Text File

Opens up a Technical Support Request Form so that you will understand what kind of information is needed if you run into problems and require technical assistance.

[AFLASH2] Folder

This utility allows you to upgrade your Notebook PC’s BIOS in DOS mode. You enter DOS mode by booting to a DOS system on a floppy disk, CD, or USB drive instead of entering the Windows operating system. AFLASH2.EXE can be found in the Aflash folder of the support CD.

[Exit] Link

Closes the support CD autorun screen.

Drivers Provided in Windows XP

If you have any problems with these drivers, visit the Microsoft Windows Update site. A link is provided in Microsoft Windows Explorer under “Tools.”

1394 (Already supported in Windows XP)

This driver is provided by Microsoft in its Windows XP operating system.

This device is shown under Windows Device Manager “**IEEE 1394 Bus host controllers**”.

AGP (Already supported in Windows XP)

This function is already supported in Windows XP. The support CD also includes a version of this utility for other Windows versions. Installation will not be possible under Windows XP.

This device is shown under Windows Device Manager “**System devices**”.

PCMCIA (Already supported in Windows XP)

This driver is provided by Microsoft in its Windows XP operating system.

This device is shown under Windows Device Manager “**PCMCIA adapters**”.

USB 2.0 (Already supported in Windows XP SP1 & Windows 2000 SP4)

This driver is provided by Microsoft in its Windows operating system. The support CD also includes a version of this driver for Windows 98 SE or Windows ME. This driver is not required for Windows 2000 or Windows XP and installation will not be possible.

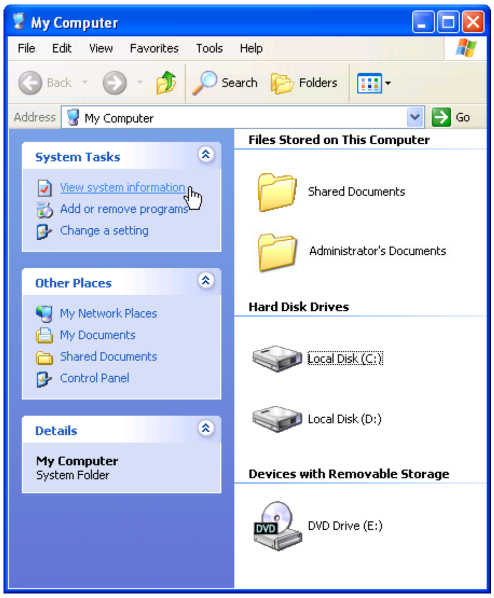
This device is shown under Windows Device Manager “**Universal Serial Bus controllers**”.

Device Manager

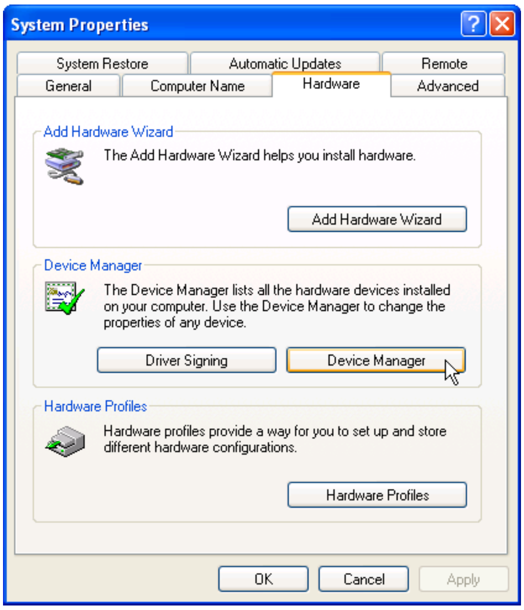
"Device Manager" will be used in many device driver installation, upgrade, and verification processes.



1. Click "start" button.
2. Click "My Computer" icon.



3. Click "View system information" link.

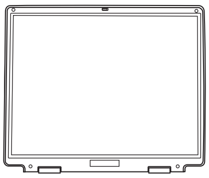


4. Click "Hardware" tab.
5. Click "Device Manager" button.

Hardware Devices

After installing your operating system, several question marks will appear under "Other devices" representing hardware devices that Windows cannot recognize. After installing the drivers from the provided support CD. Those question marks will go away.





VGA Driver

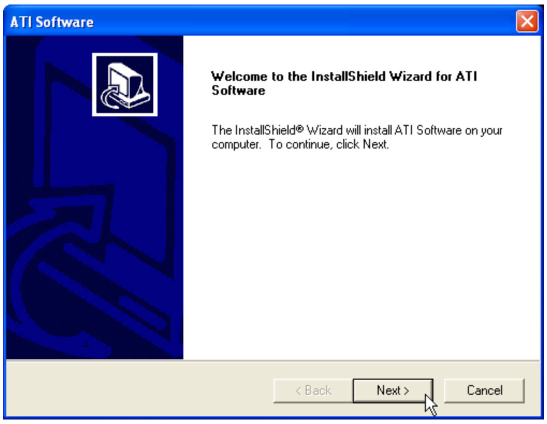
(It is necessary to install the VGA driver first in order to see other setup screens in their proper sizes.)

	Before	After
Model 1	Video Controller (VGA Compatible)	ATI MOBILITY RADEON 9200
Model 2	Video Controller (VGA Compatible)	ATI MOBILITY RADEON 9700

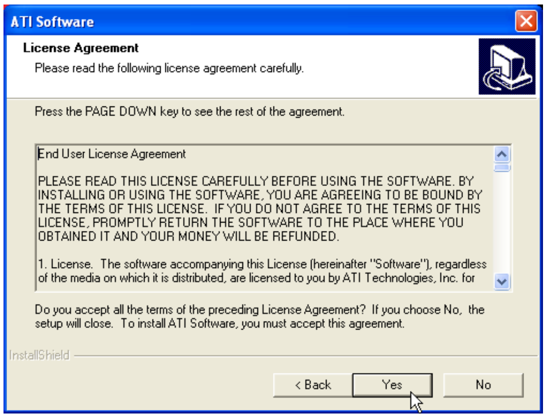
Screens will vary depending on your operating system but the contents should be the same.

VGA Driver Setup

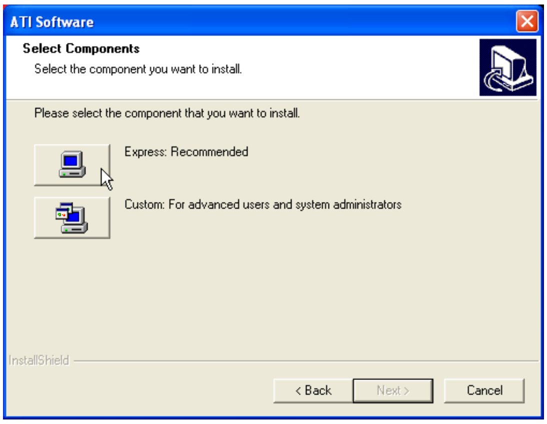
Your VGA driver will depend on the Notebook PC model purchased. Running setup will give you the following wizard.



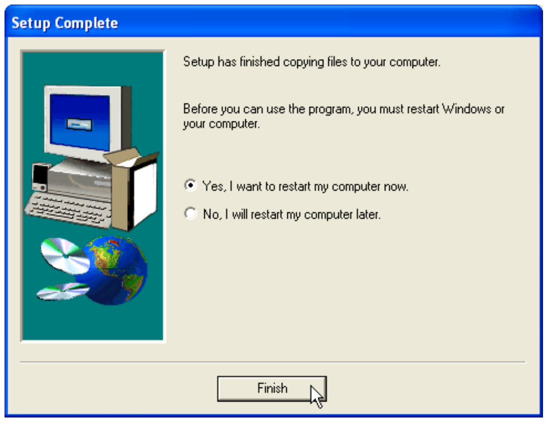
1. On the “Welcome” screen, click **Next** after reading the message.



2. On the “License Agreement” screen, click **Next** after reading.



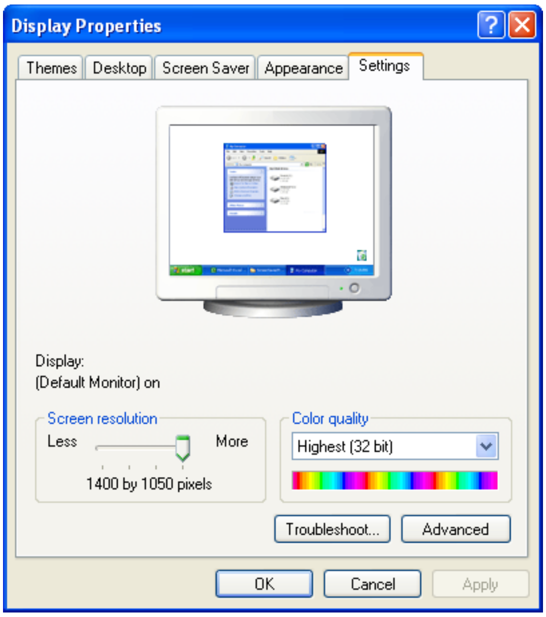
3. On the “Select Components”, click **Express** to use the default settings.



4. When setup is complete, select “Yes...” and click **Finish** in order to restart Windows with a higher screen resolution*.

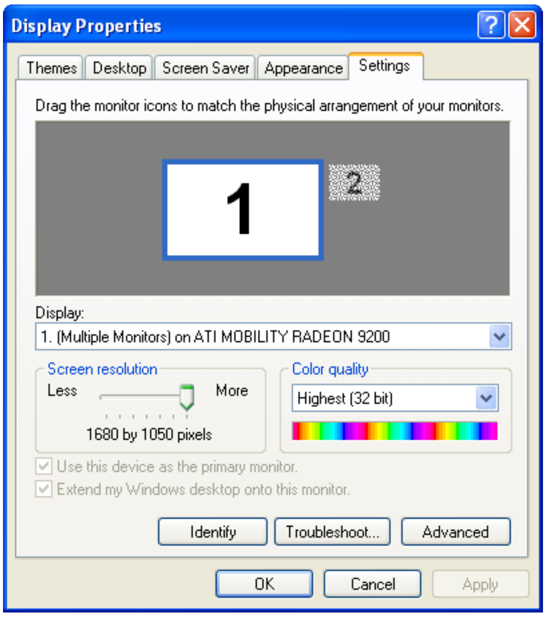
*** Windows may have already provided the highest screen resolution support for this graphics controller.**

VGA Driver Setup (Cont.)



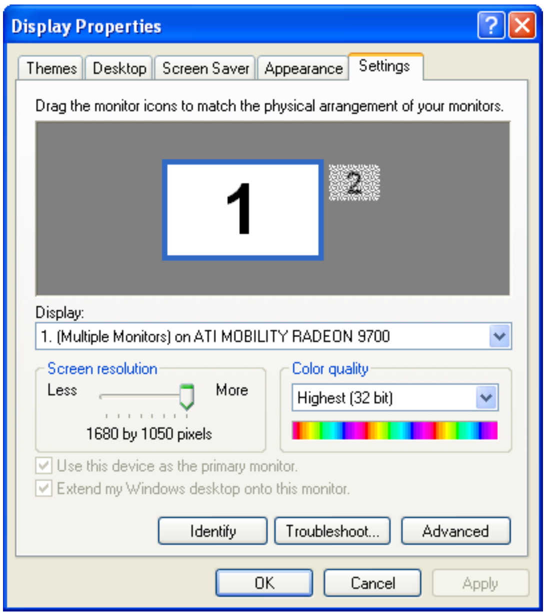
Before VGA drivers are installed, graphics functions are limited.

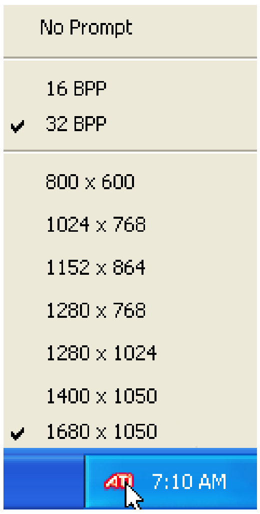
Model 1



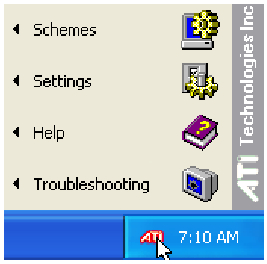
Make screen resolution settings in “Display Properties”. Higher resolutions may be available but panning will occur if you surpass the display panel’s specifications.

Model 2





Left click



Right click

Use the taskbar icon to bring up shortcuts to display settings.

ATKACPI Driver (ATK0100)

(Required driver)

Topics Covered:

ATKACPI Driver Setup

Before



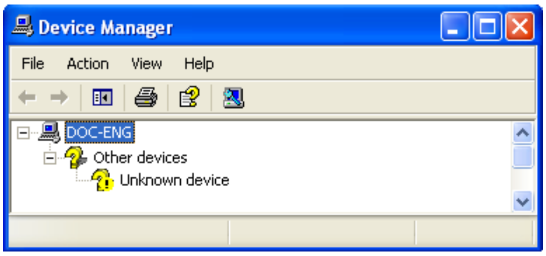
After



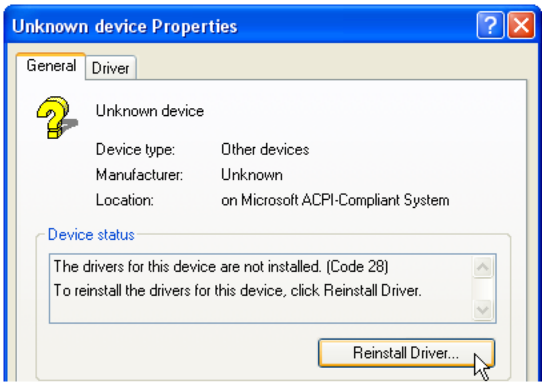
Screens will vary depending on your operating system but the contents should be the same.

ATK0100 Driver Setup

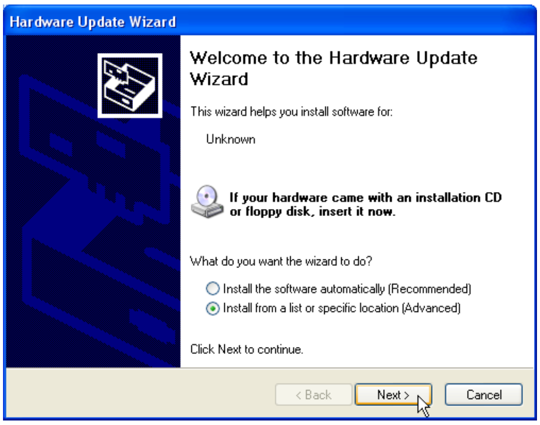
This driver requires that you manually install it from Device Manager. No software operation is required.



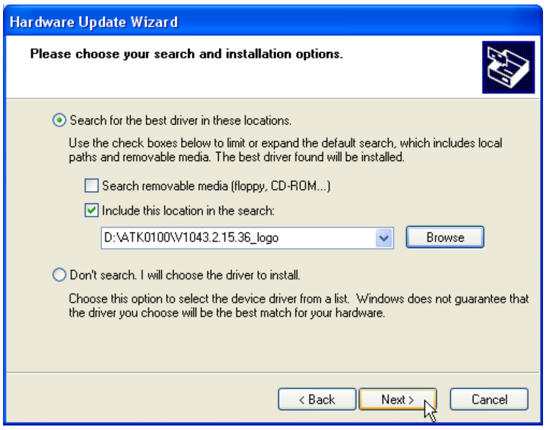
1. Double click **Unknown device**.



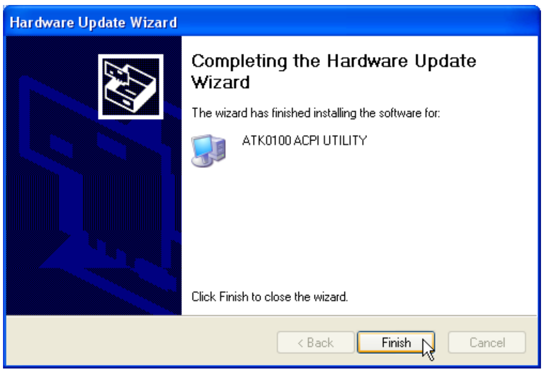
2. Click **Reinstall Driver**.

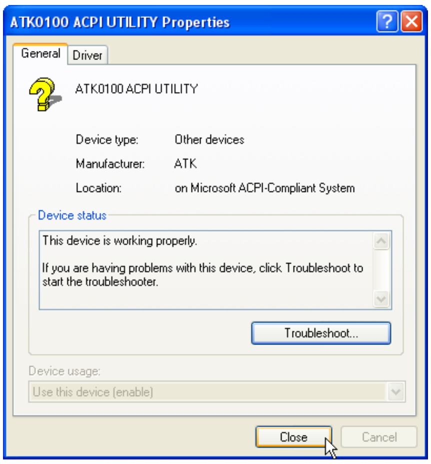


3. Select "Install from..." and click **Next**.



4. Browse to your operating system folder in the "ATK0100" folder and click **Next**.



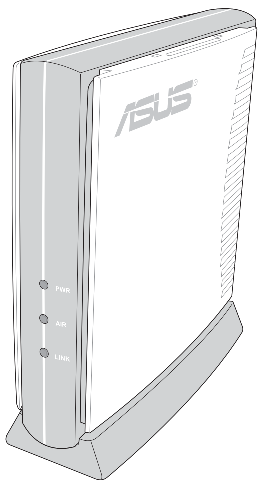


5. Click **Finish** when setup is complete.
6. Click **Close** to close the properties window.

SiS USB Wireless LAN

(Required driver on selected models)

Topics Covered:
Wireless LAN Driver Setup
Wireless LAN Utility Setup
Wireless LAN Utility Quick Start



An access point, like the **ASUS WLAN Access Point** is required to setup a wireless network for the Notebook PC to connect to.

Before

USB Device

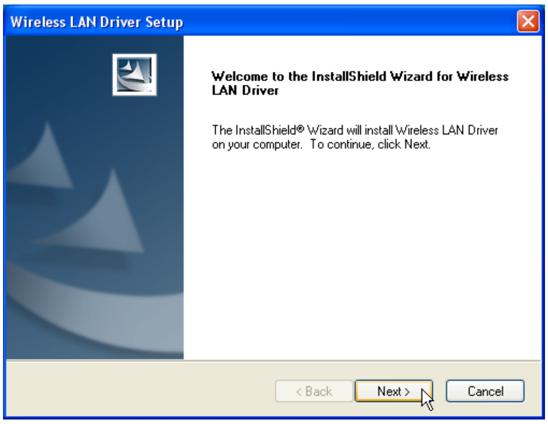
After

ASUS 802.11b Wireless LAN Adapter

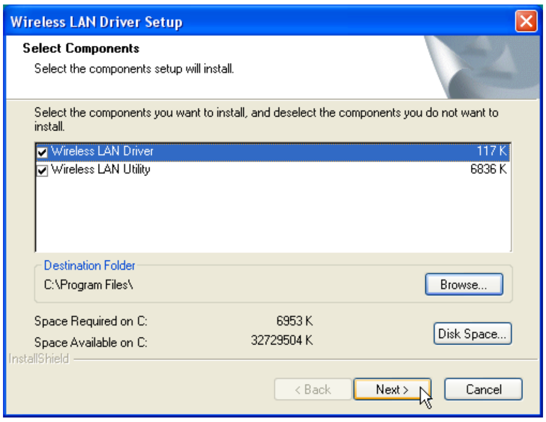
Screens will vary depending on your operating system but the contents should be the same.

Wireless LAN Driver Setup

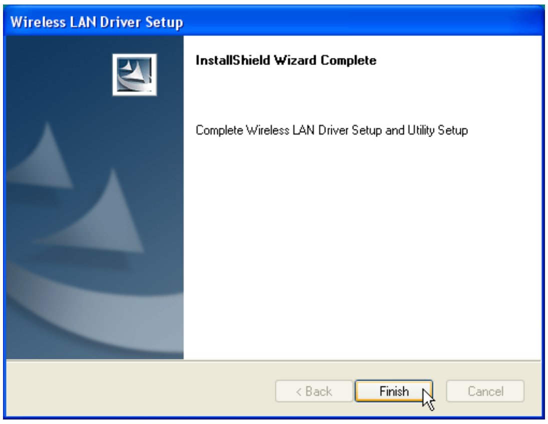
Running setup will give you the following wizard:



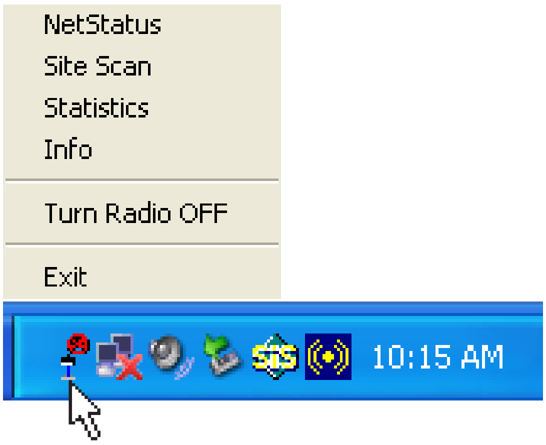
1. On the “Welcome” screen click **Next** after reading the message.



2. On the “Select Components” screen, click **Next** to use the default settings.



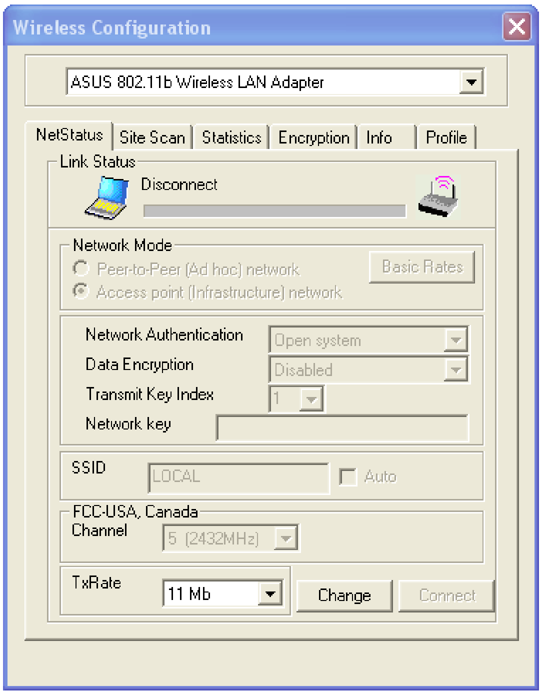
3. On the “Wizard Complete” screen, click **Finish** to exit the installation wizard.



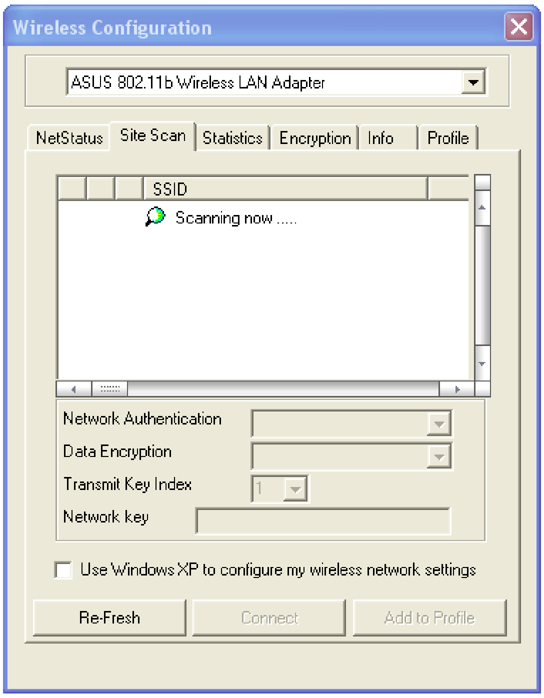
Use the taskbar icon to bring up shortcuts to settings.

Wireless LAN Utility Introduction

After installing the Wireless driver and utility, the utility will automatically start with Windows. If you need to start it manually, you can launch the utility using the desktop icon or through Windows **start**. You will need to make some wireless LAN settings before being able to use your wireless connection.

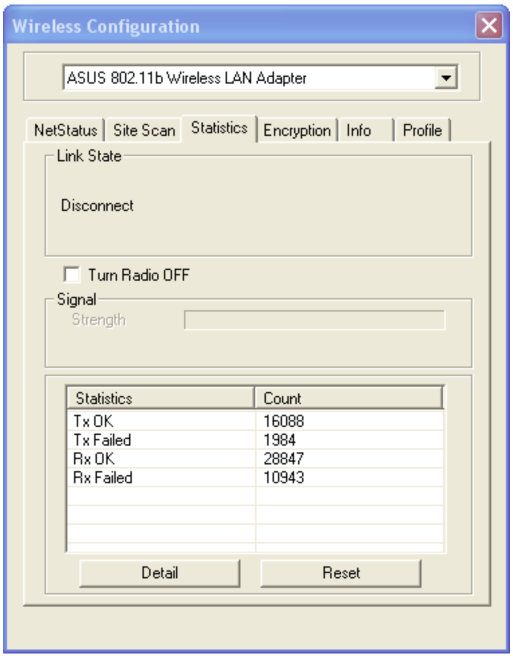


Network Status page - View connection status here.

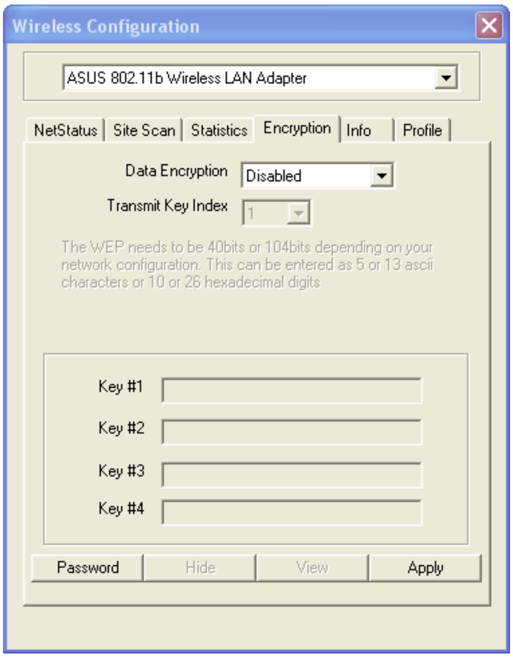


Site Scan page - View available access points here. You can click Connect to attempt to use the selected access point.

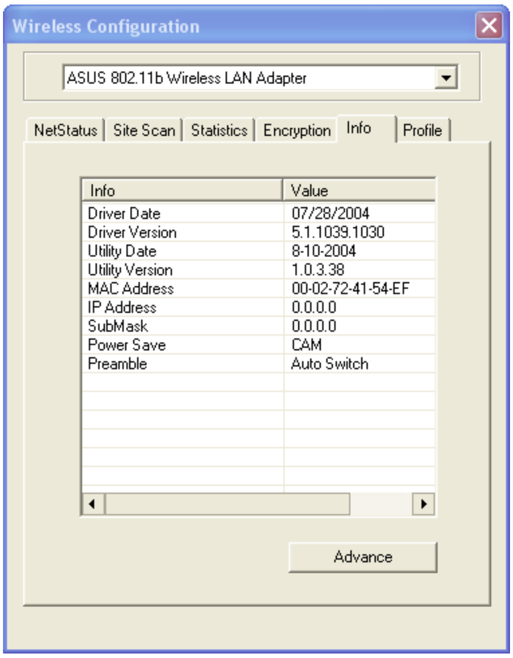
Wireless LAN Utility Quick Start (Cont.)



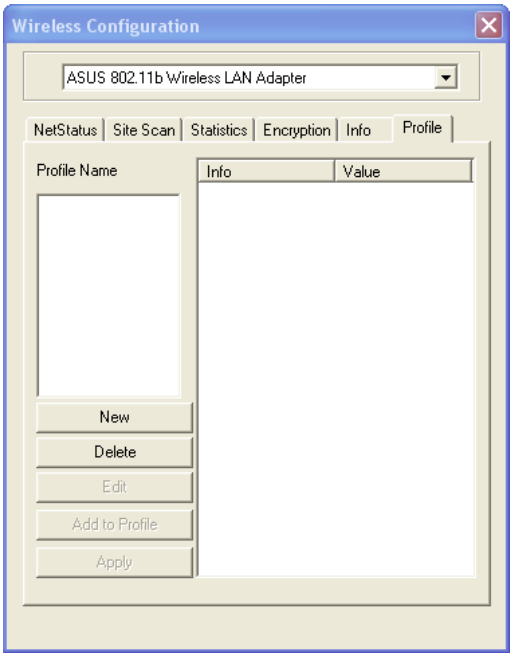
Statistics page - View transmission data (count) here if troubleshooting connection problems.



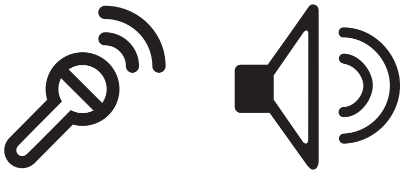
Encryption page - Settings must match those set in the access point in order to successfully connect. Click **Apply** to save your settings.



Info page - Report if contacting customer service for help.



Profile page - Save settings for each location (work, home, school, etc.).

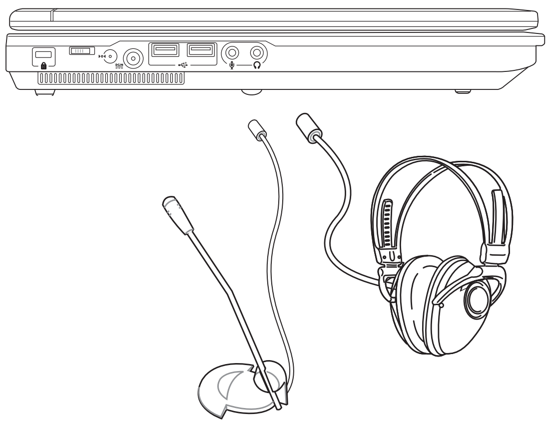


Audio

(Required driver)

Topics Covered:

Audio Setup



The notebook PC has built-in speakers and microphone, however, external audio accessories may be used. External audio connections will disable the notebook PC's relevant built-in audio device (mic and/or speakers).

Before

Multimedia Audio Controller

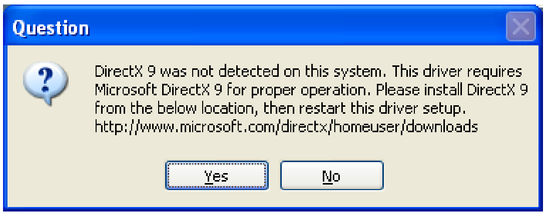
After

NVIDIA(R) nForce(TM) Audio Codec Interface

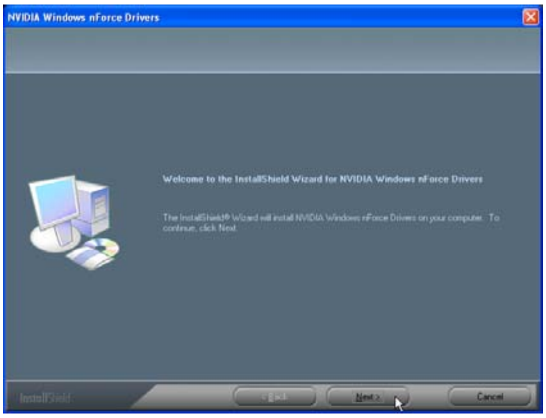
Screens will vary depending on your operating system but the contents should be the same.

Audio Setup

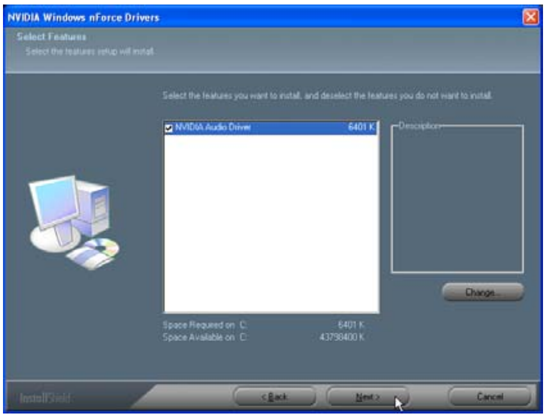
Running setup will give you the following wizard. After setup, launch the software using the shortcut from your desktop or Start menu.



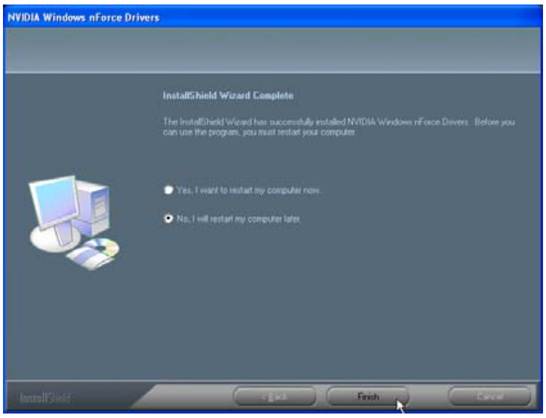
1. Install DirectX first or else you will not be allowed to continue.



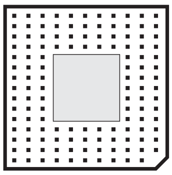
2. On the “Welcome” screen, click **Next**.



3. On the “Select Features” screen, click **Next** with “NVIDIA Audio Driver” selected.



4. When setup is complete, select **No...** and click **Finish** in order to install other items.



CPU Hotfix

(Required Driver)

<u>Topics Covered:</u>

CPU Hotfix Setup

Screens will vary depending on your operating system but the contents should be the same.

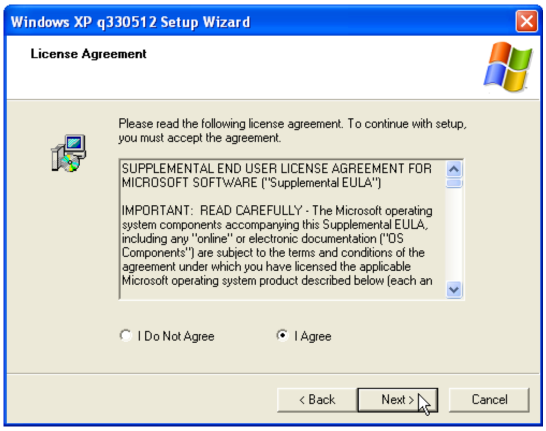
CPU Hotfix Setup 1 of 2

Two setups are required. There are several languages available in each folder. After setup, restart Windows and your Windows will be able to utilize advanced features in Intel's latest mobile processor. The first file will extract to a separate folder. Read "hotfix" for setup instructions.

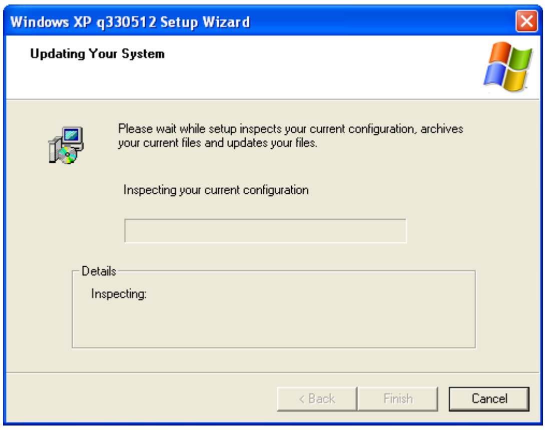




1. On the "Welcome" screen, click **Next** after reading the message.



2. On the "License Agreement" screen, select "**I Agree**" and click **Next** after reading the message.



3. Wait while your system is being updated.



4. When setup is complete, select "Do not restart now" and click **Finish** in order to install other items.

INF Update (NVIDIA)

(Required driver)

Topics Covered:

INF Update Driver Setup

Before

SM Bus Controller

After

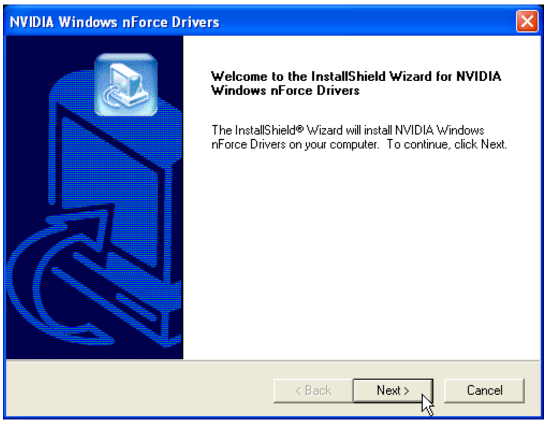
NVIDIA nForce PCI System Management

Screens will vary depending on your operating system but the contents should be the same.

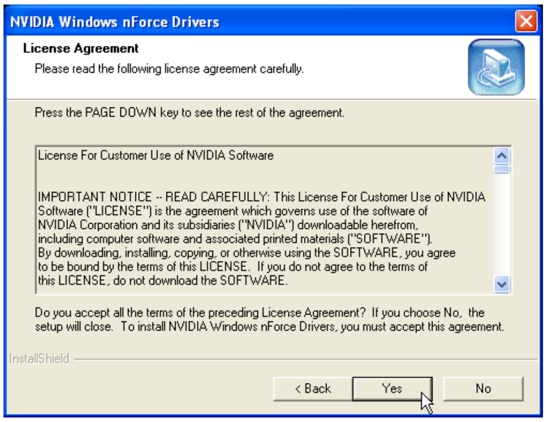
Software Drivers

INF Update Driver Setup

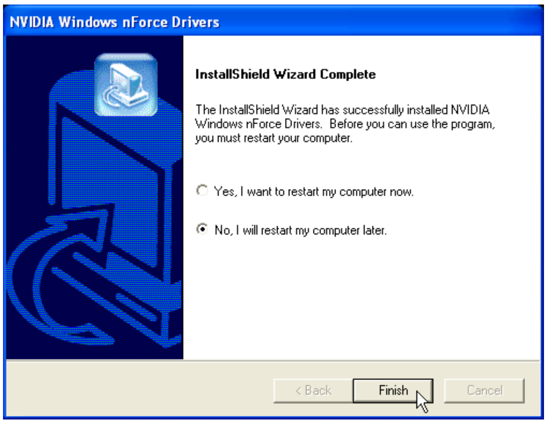
This driver requires that you manually install it from Device Manager. No software operation is required.



1. On the “Welcome” screen, click **Next** after reading the message.



2. On the “License Agreement” screen, click **Next** after reading the message.



3. Setup is now complete, select “**No...**” and click **Finish** in order to install other items.

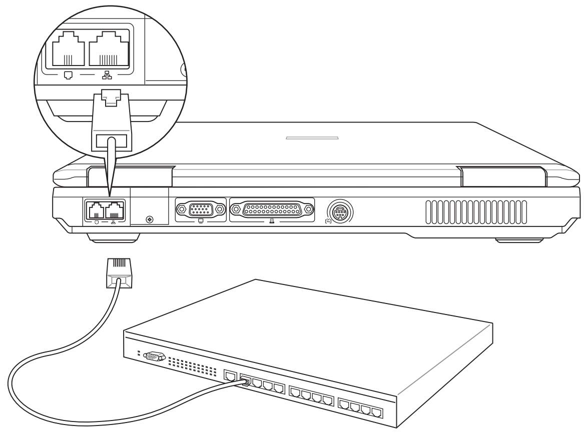
LAN

(Required driver)

Topics Covered:

LAN Driver Setup

Configuring your LAN



Connect the LAN port to a network to begin using the built-in LAN function.

Before

Ethernet Controller

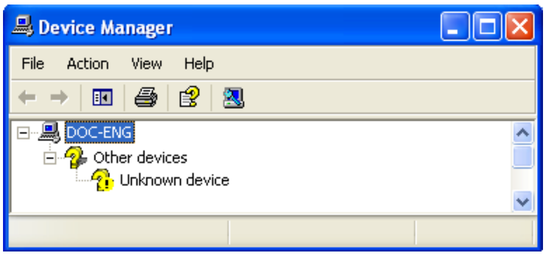
After

Marvell Yukon Gigabit Ethernet 10/100/1000Base-T

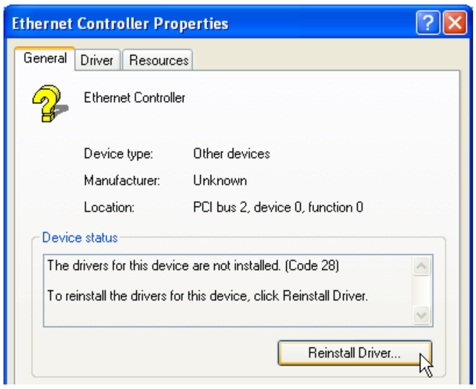
Screens will vary depending on your operating system but the contents should be the same.

LAN Driver Setup

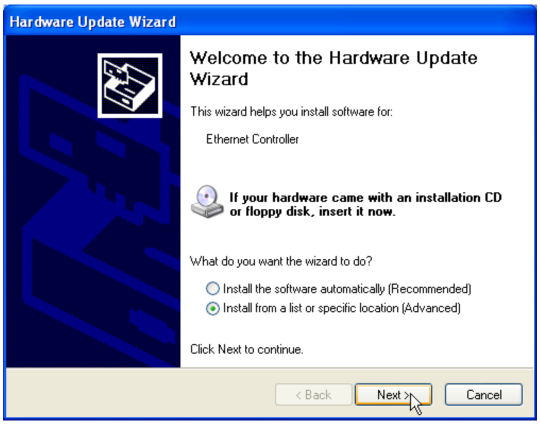
You will see a “Found New Hardware Wizard” if you device requires setup. If not your driver may already be installed by Windows. If your device is not working, you can manually install the driver as follows:



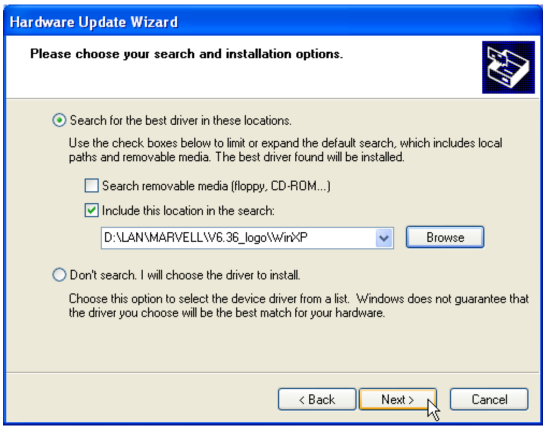
1. Double click **Unknown device**.



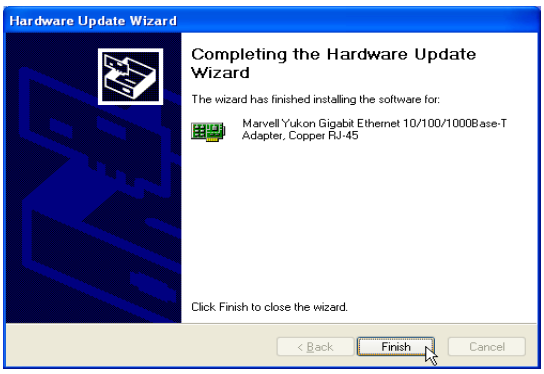
2. Click **Reinstall Driver**.



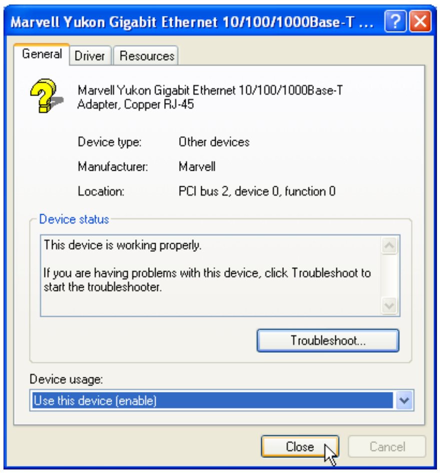
3. Select “Install from...” and click **Next**.



4. Browse to your operating system folder in the “ATK0100” folder and click **Next**.



5. Click **Finish** when setup is complete.



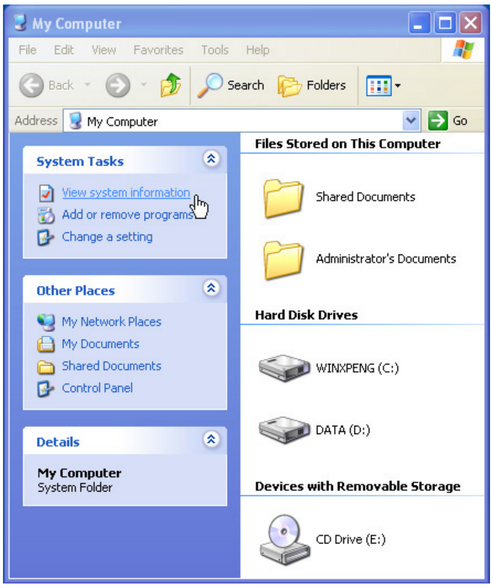
6. Click **Close** to close the properties window.

Configuring your LAN

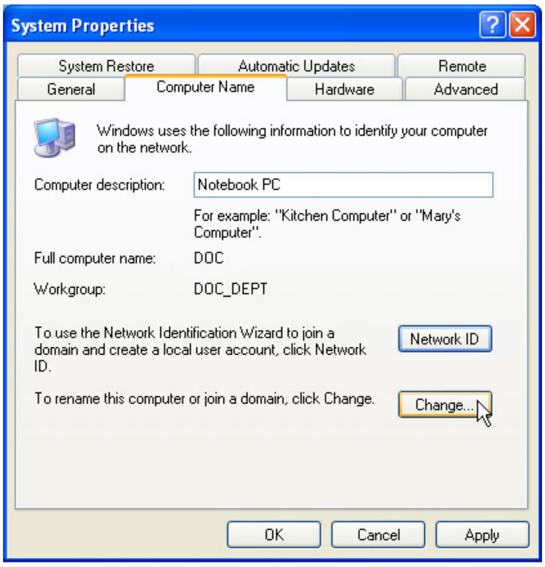
Joining a Domain or Workgroup (Windows XP)



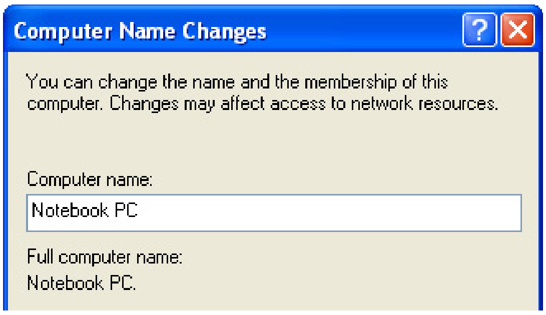
(1) Click **Start** and **My Computer**.



(2) Click **View system information**.

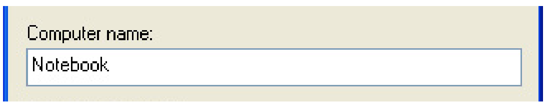


(3) Your computer name, workgroup or domain information is shown here. Click **Change** to view options.

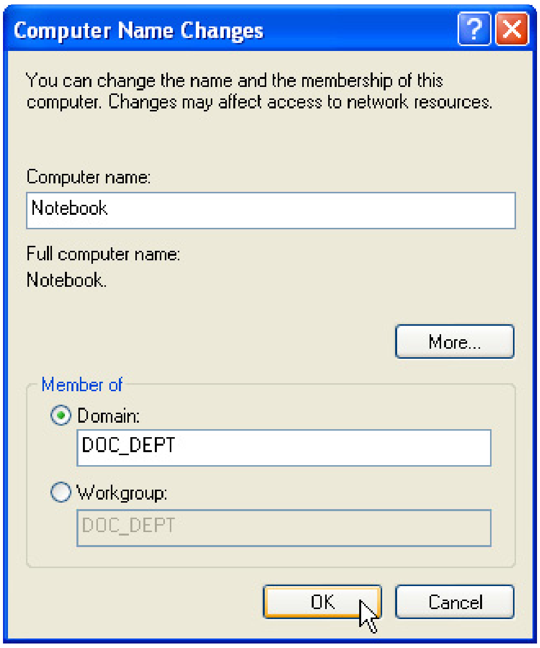




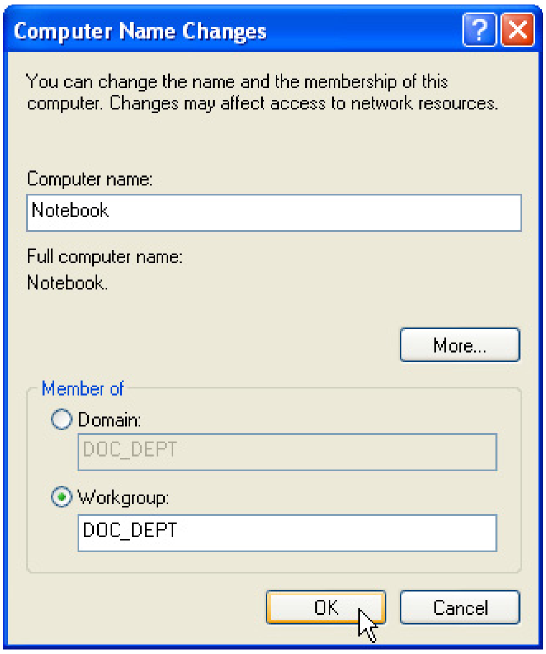
You cannot use spaces or symbols in the computer name. In the example here, a warning is given when trying to use “Notebook PC”. You can use the single word “Notebook” instead.



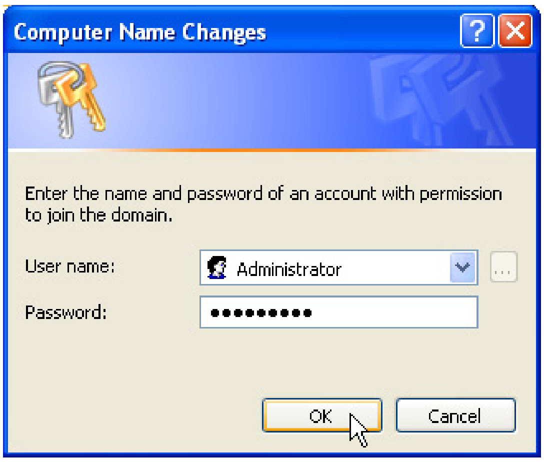
Joining a Domain or Workgroup (Cont')

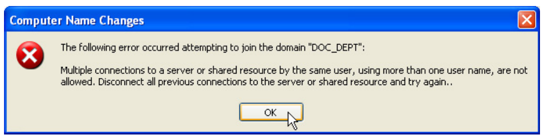


(4a) Domain:
The primary server in the domain will perform routing functions and security verifications for your computer. Select **Domain** and enter an existing domain you wish to join. **NOTE:** After clicking "OK", you will be asked for the Domain Controller's Administrator password to join the domain in Windows XP.



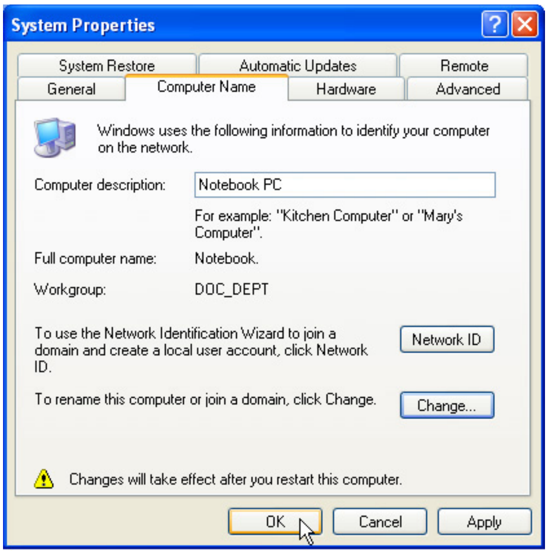
(4b) Workgroup:
If your network does not have a domain or you are not authorized to join a domain, select Workgroup and type in an existing name or create your own (by typing an unused workgroup name)

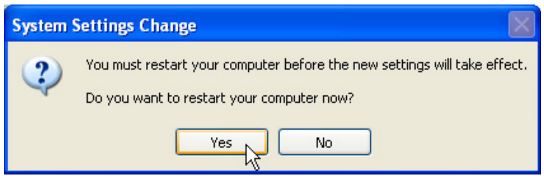




Administrator Name or Password not accepted: You cannot login with the Administrator name and use one password, then use the Administrator name with another password to add to a domain. You must login using another name. See Windows documentation to "Add New User" from User Accounts in the Control Panel.

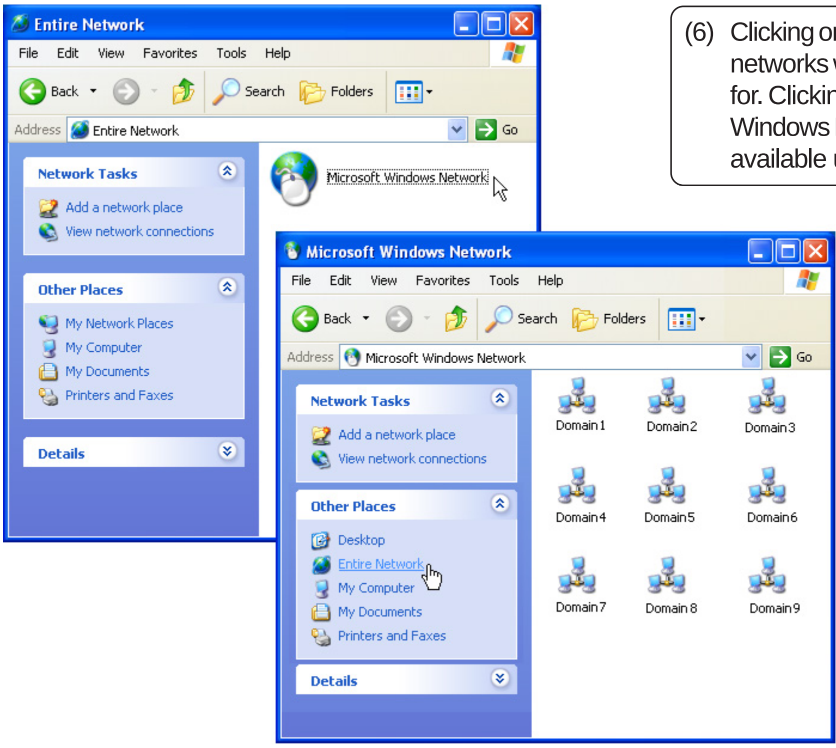
Joining a Domain or Workgroup (Cont')





(5) After you restart your computer, you should see some contents through Entire Network.

Viewing Your Network

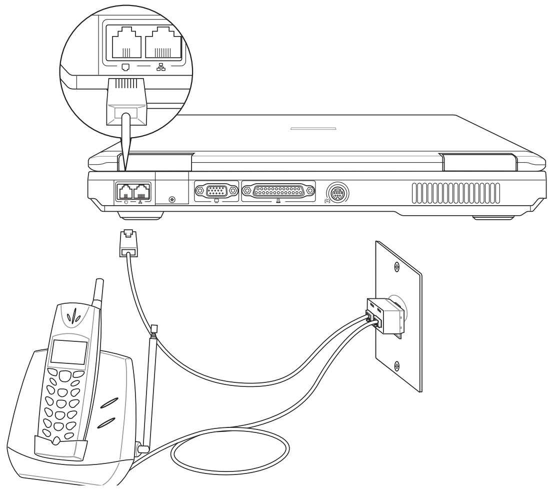


(6) Clicking on "My Network Places" will display networks which you have installed protocols for. Clicking a network protocol such as "MS Windows Network" will display all the servers available under that protocol.

Modem

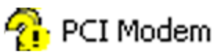
(Required driver)

Topics Covered:
Modem Driver Setup
Modem Configuration

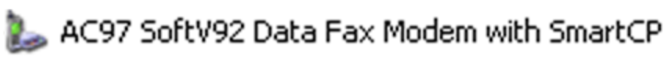


Connect a telephone cable from your Notebook PC to a telephone jack.

Before



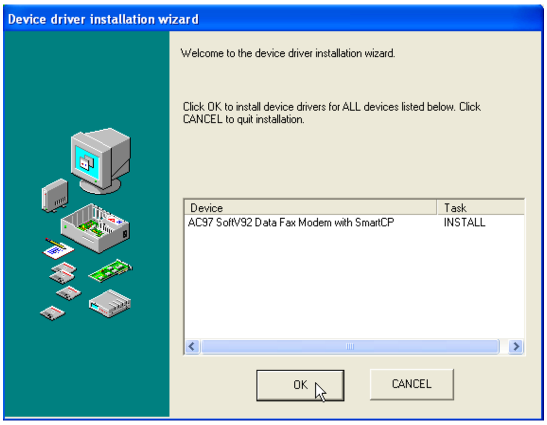
After

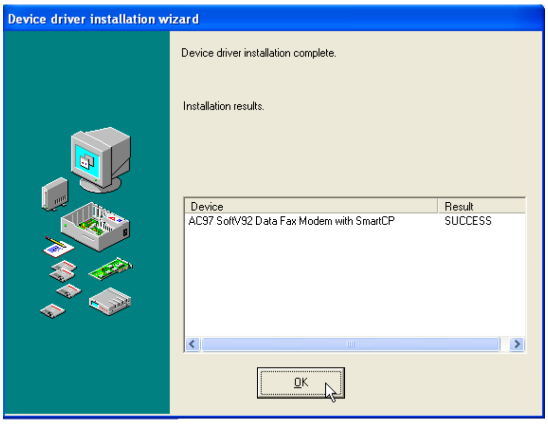


Screens will vary depending on your operating system but the contents should be the same.

Modem Driver Setup

Running setup will give you the following wizard:



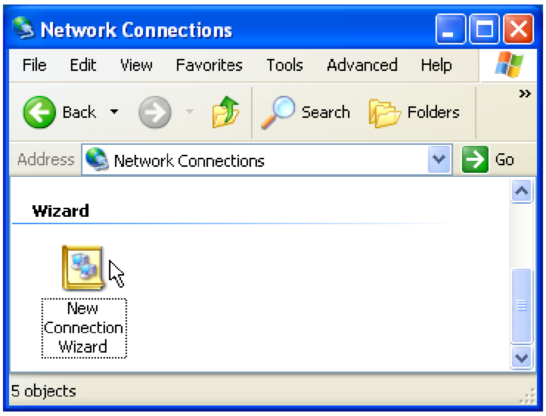


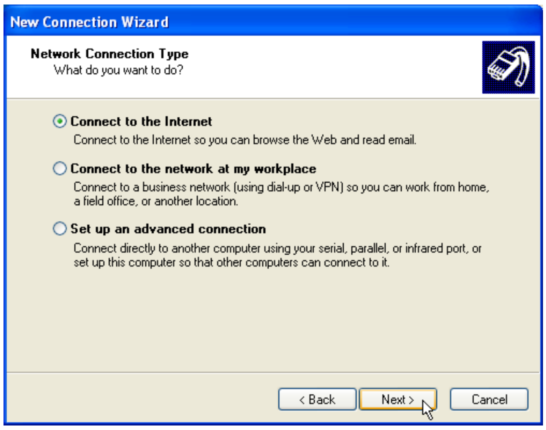
1. On the "Welcome" screen, click **Next** after reading the message.

2. Setup is now complete, click **OK** to exit the wizard.

Modem Configuration

Use **New Connection Wizard** in "Network Connections" to start the configuration wizard to your modem. The New Connection Wizard also allows configuration for other communication devices (if available) such as LAN, ISDN, ADSL, or Bluetooth.

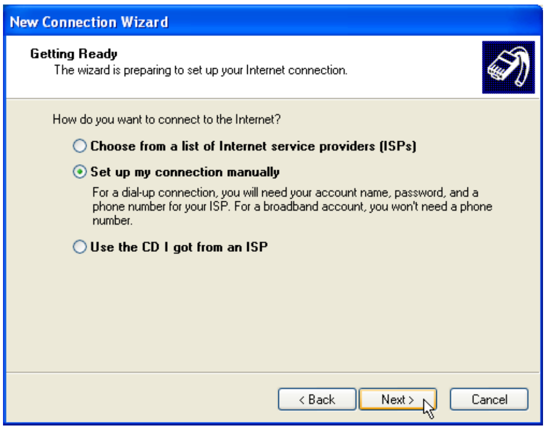




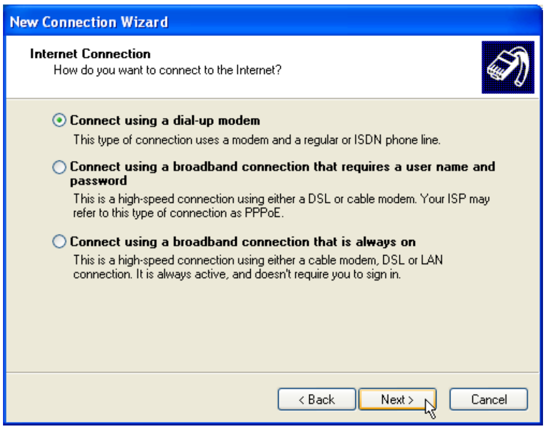
1. Double-click **New Connection Wizard** in Network Connections

2. Select "Connect to the Internet" and click **Next**.

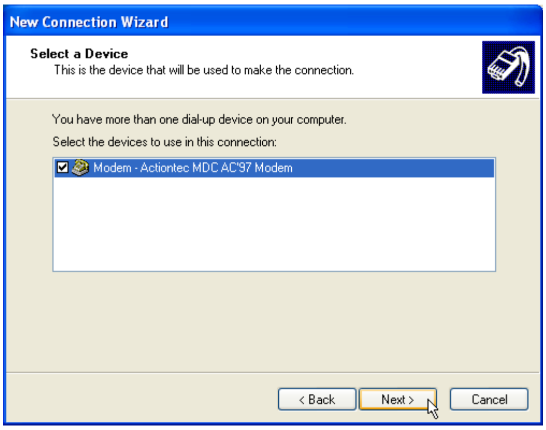
Modem Configuration (Cont')



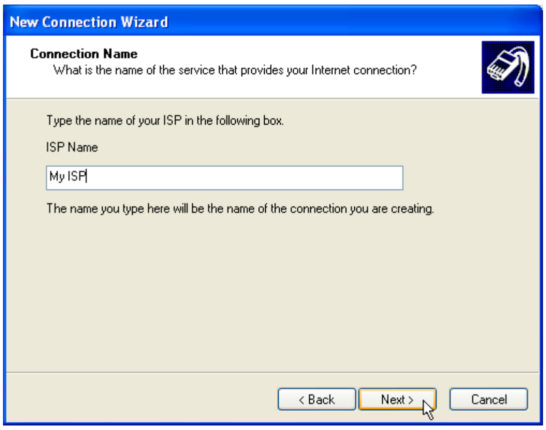
3. Select "Set up my connection manually" and click **Next.**



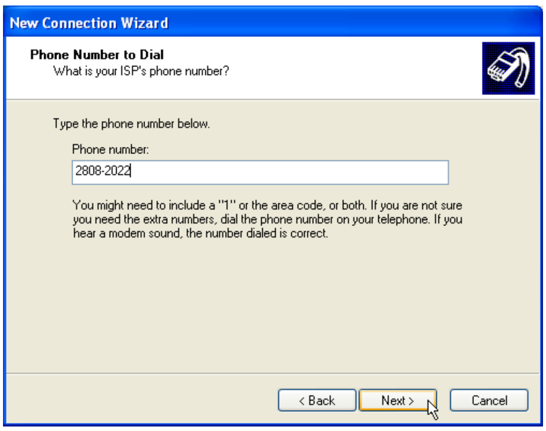
4. Select "Connect using a dialup modem" and click **Next.**



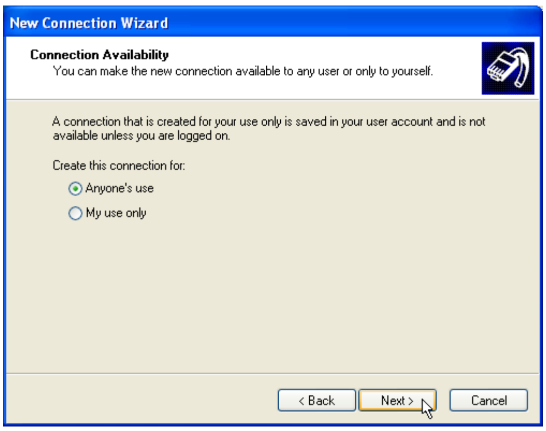
5. Select your modem and click **Next.**



6. Enter any name to represent your ISP.



7. Enter the dial up number for your ISP.



8. Selection one of the security preferences and click **Next.**

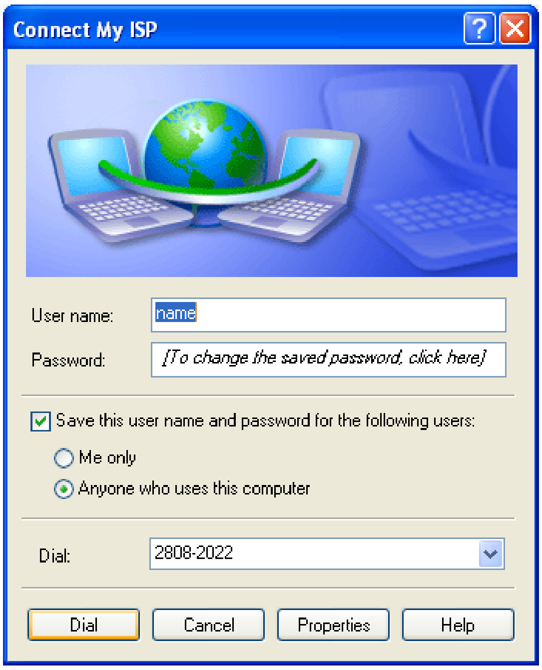
Modem Configuration (Cont')



9. Enter your ISP account name and password and click **Next**.



10. Select "Add a shortcut..." and click **Finish**.



11. When you click on the link, the connection window will show. Click **Dial** to connect to your ISP.

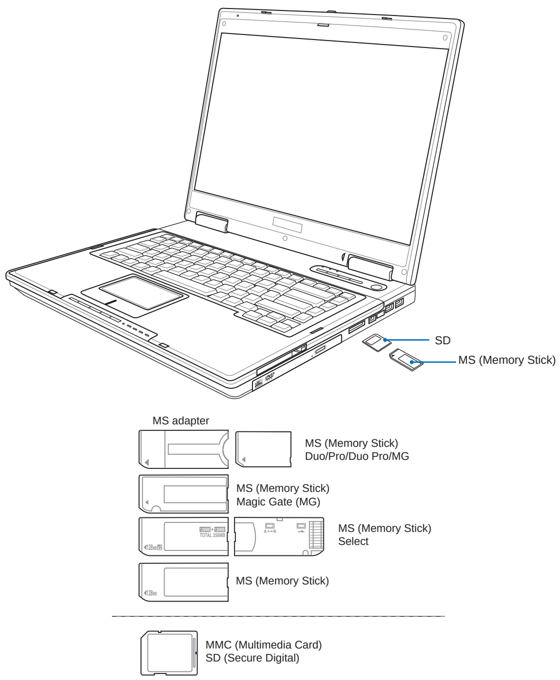


Memory Reader

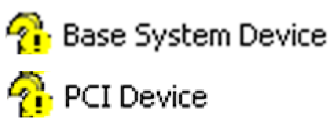
(Additional Driver)

Topics Covered:

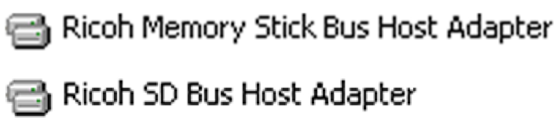
Memory Reader Driver Setup



Before



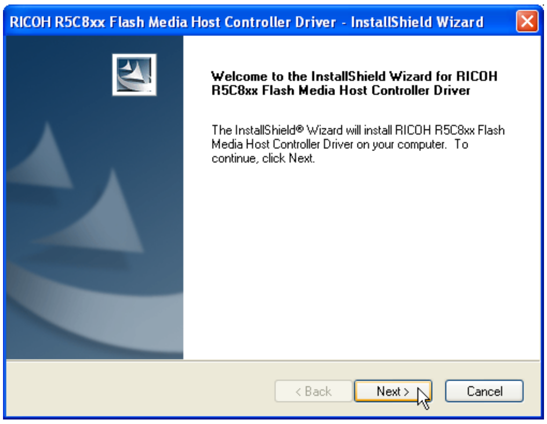
After



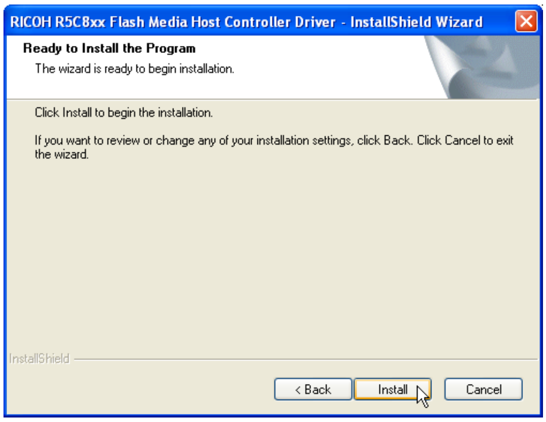
Screens will vary depending on your operating system but the contents should be the same.

Memory Reader Driver Setup

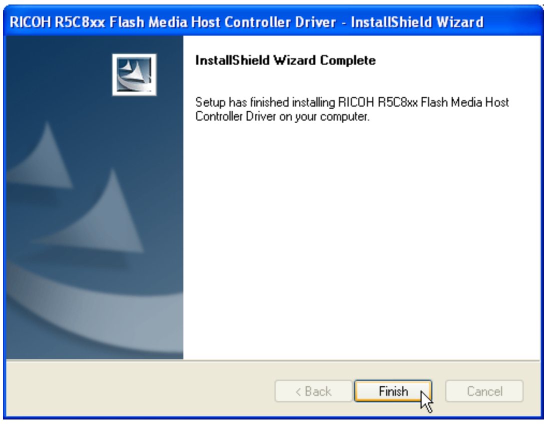
Depending on your operating system version and drivers installed, you may or may not require this driver. If the built-in flash memory card does not work. Try installing this driver. Running setup will give you the following wizard:



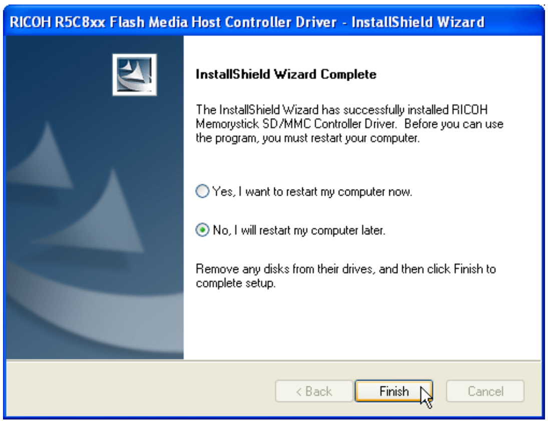
1. On the “Welcome” screen, click **Next** after reading the message.



2. Click **Install** to begin installing the driver.



3. When complete, click **Finish** to exit the setup wizard.



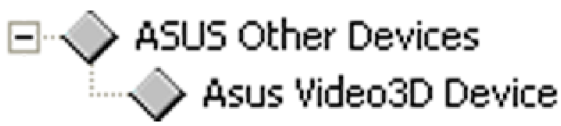
4. When complete, click **Finish** to exit the setup wizard.

GameFace (selected models)

(Required driver for GameFace software)

<u>Topics Covered:</u>
GameFace Driver Setup

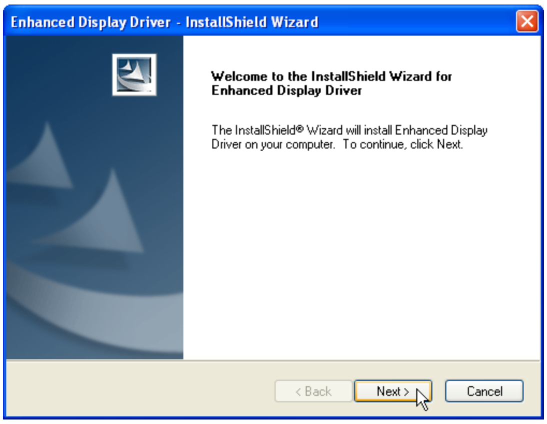
After



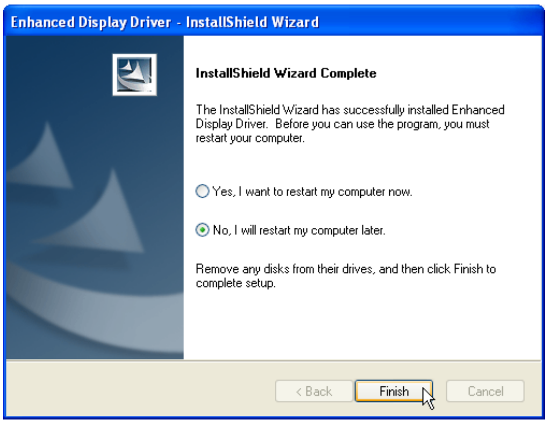
Screens will vary depending on your operating system but the contents should be the same.

GameFace Driver Setup (selected models)

Running setup will give you the following wizard:



1. On the “Welcome” screen, click **Next.**



2. When setup is complete, select “No...” and click **Finish** in order to install other items.

PowerNow

(Recommended Utility)

Topics Covered:

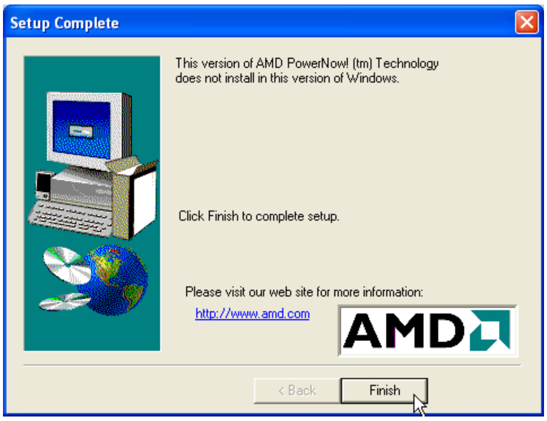
AMD PowerNow Utility Setup

Software Utilities

Screens will vary depending on your operating system but the contents should be the same.

AMD PowerNow Utility Setup

Running setup will give you the following wizard:



Setup will complete without any previous screens.
Click **Finish** to exit the setup wizard.

ChkMail

(Optional Utility)

<u>Topics Covered:</u>

ChkMail Setup

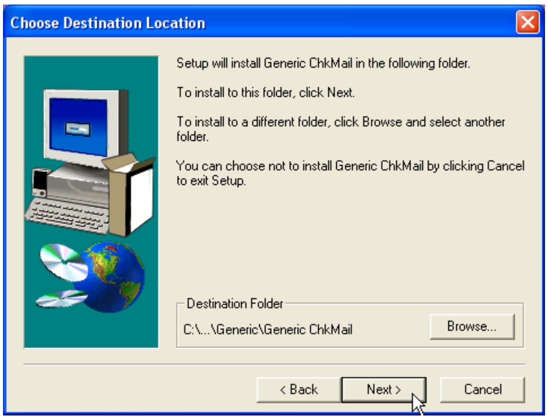
Screens will vary depending on your operating system but the contents should be the same.

ChkMail Setup

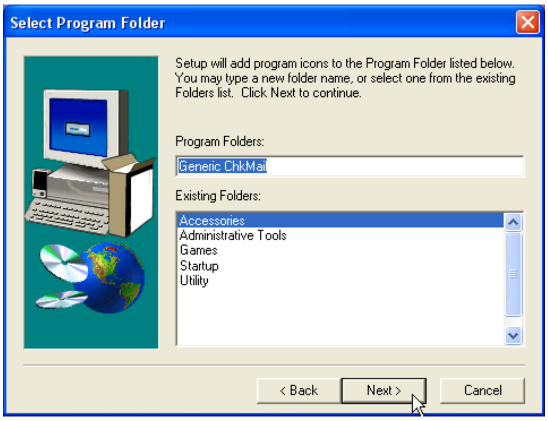
Running setup will give you the following wizard:



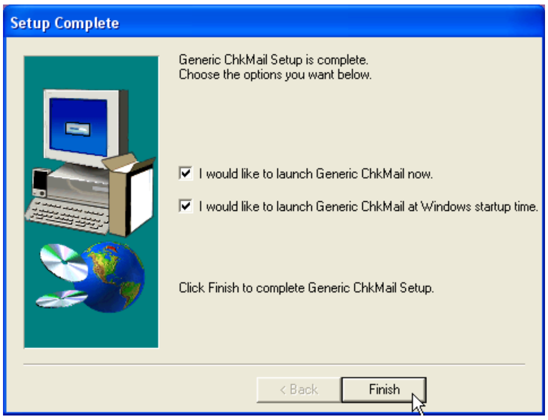
1. On the "Welcome" screen, click **Next** after reading the message.



2. On the "Choose Destination Location" screen, click **Next** to continue or you may first change the destination folder.

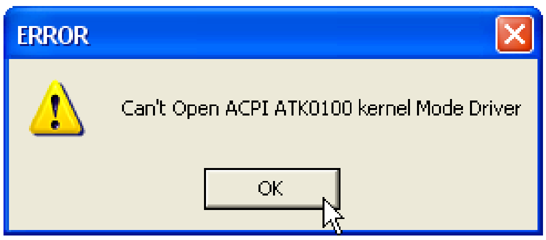


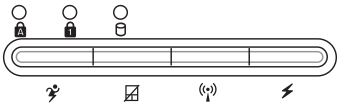
3. On the "Select Program Folder" screen, click **Next** to continue or enter a different folder name.



4. On the "Setup Complete" screen, click **Finish**.

NOTE: You cannot run this utility without first installing "ATK0100". You will be given this message if you do not have the driver installed.





Hotkey

(Required utility)

<u>Topics Covered:</u>

Setup Screens

Hotkey Reference

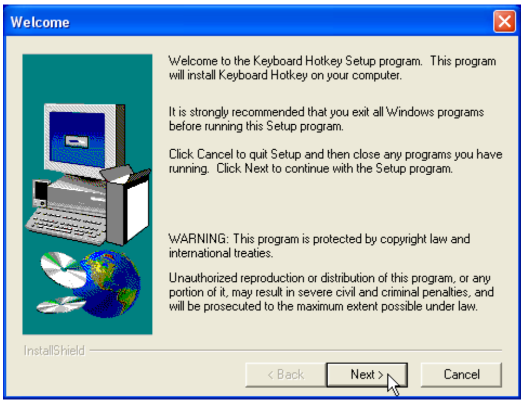
Hotkey Actions

Adding a Program to Run

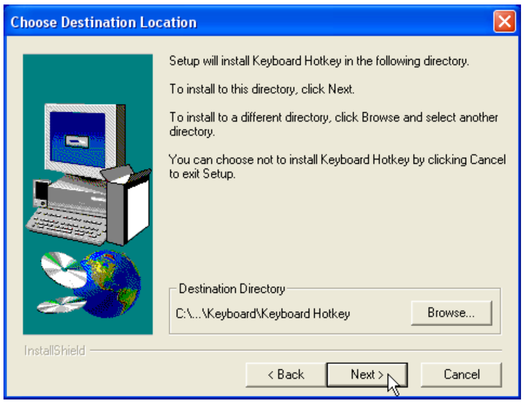
Screens will vary depending on your operating system but the contents should be the same.

Hotkey Setup

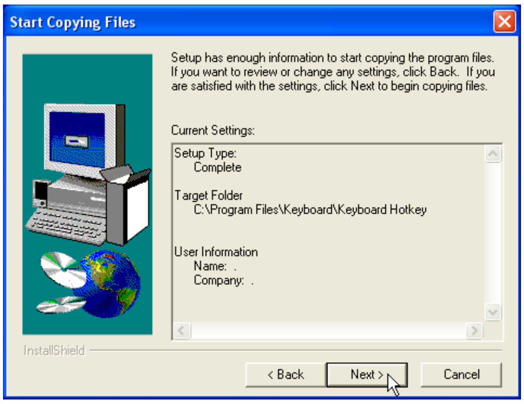
Running setup will give you the following wizard:



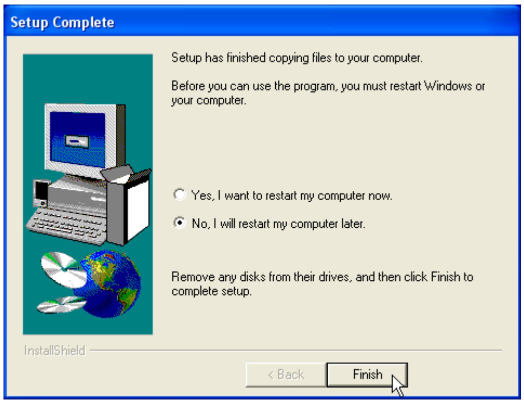
1. On the “Welcome” screen, click **Next** after reading the message.



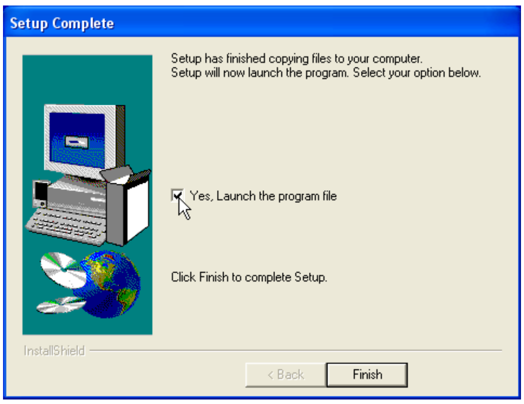
2. On the “Choose Destination Location” screen, click **Next** to continue or you may first change the destination folder.



3. On the “Start Copying Files” screen, click **Next** after checking the current settings.



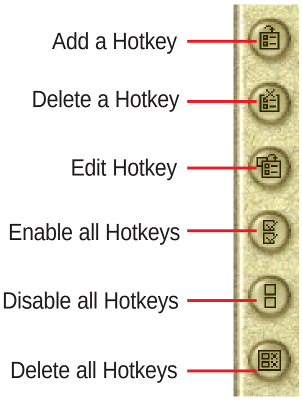
4. When setup is complete, select “No...” and click **Finish** in order to install other items.



5. You can select to launch the utility now.

Hotkey Reference

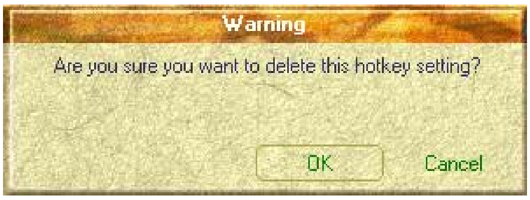
Buttons



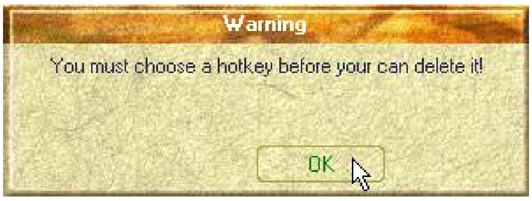
The functions of the buttons located on the left side of the program window are labeled here.

Delete a Hotkey

Highlight a Hotkey and click this button to delete it from the current category.

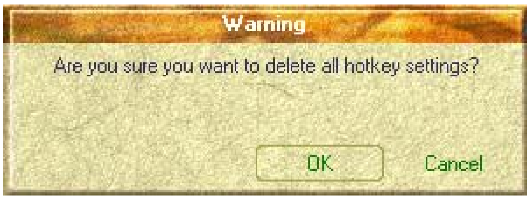


If you did not select a Hotkey, a message will show:



Delete all Hotkeys

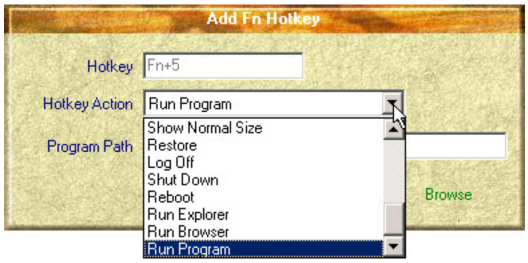
Deletes all Hotkeys in the current category. This confirmation will be shown:



Add a Hotkey

You can assign three Hotkeys to the two preset by the utility for a maximum of five. If you don't use the two preset, you can delete them for your own applications.

When you choose to add a hotkey, you can specify a key by pressing that key or key combination in the Hotkey box (the <Fn> key cannot be entered and will be automatically added to the "Notebook Fn Hotkey" category). The available Hotkey actions for assignment are shown in the "Hotkey Action" pull down.



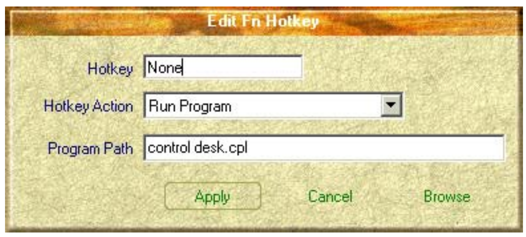
If you already have five hotkey settings, you will get this message.



Edit a Hotkey

Highlight a Hotkey and click this button to change its Hotkey or action.

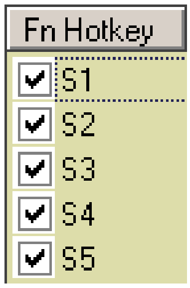
You can enter any information just like adding a Hotkey.





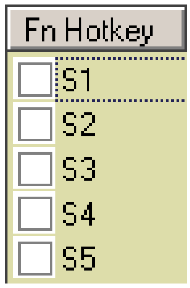
Enable all Hotkeys

Enables all Hotkeys by placing check marks in front of the Hotkeys in the current category.



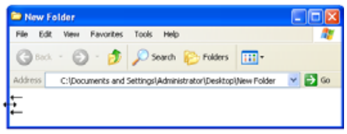
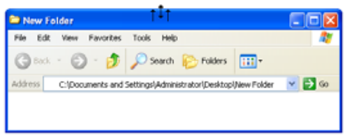
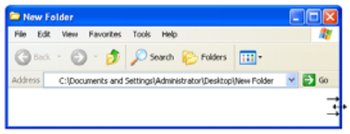
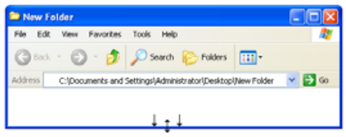
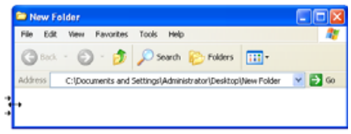
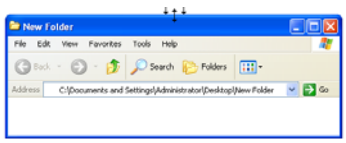
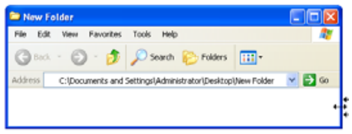
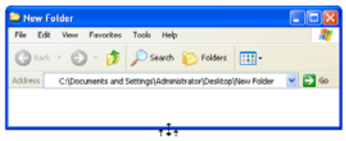
Disable all Hotkeys

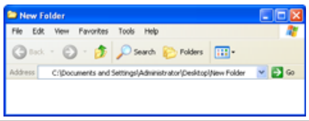
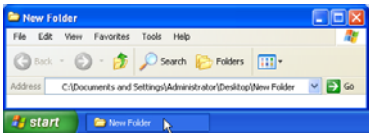
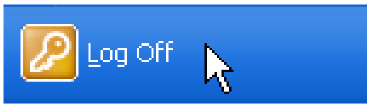
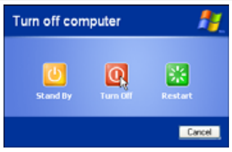
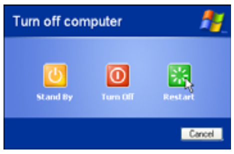
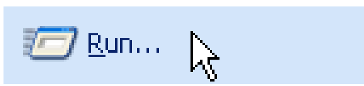
Disables all Hotkeys by removing check marks from the front of the Hotkeys in the current category.



Hotkey Actions

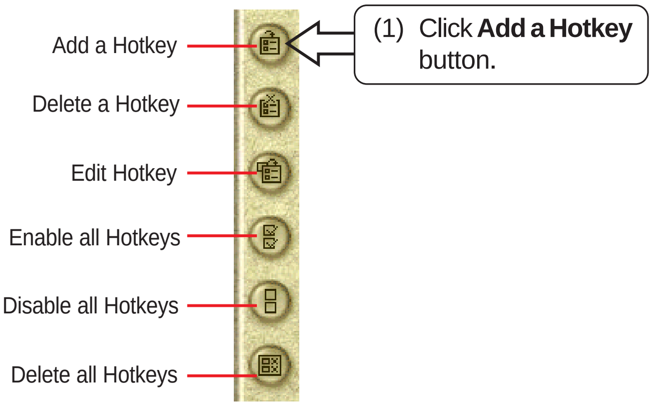
Actions	Descriptions	Examples (of action)
None:	Performs no action	--
Move Window To Left:	Moves the active window left between 1-50 steps	
Move Window To Up:	Moves the active window up between 1-50 steps	
Move Window To Right:	Moves the active window right between 1-50 steps	

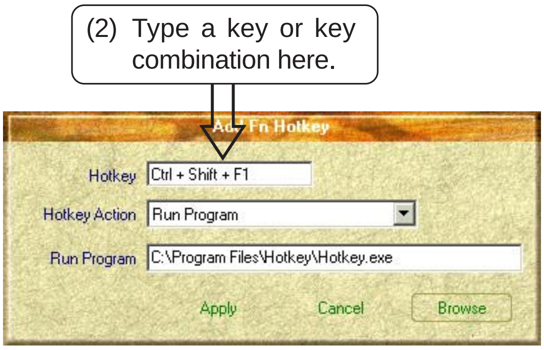
Actions	Descriptions	Examples (of action)
Move Window To Below:	Moves the active window down between 1-50 steps	
Extend Window From Left:	Stretches the active window left between 1-50 steps	
Extend Window From Up:	Stretches the active window up between 1-50 steps	
Extend Window From Right:	Stretches the active window right between 1-50 steps	
Extend Window From Below:	Stretches the active window down between 1-50 steps	
Shrink Window from Left:	Shrinks the active window from the left between 1-50 steps	
Shrink Window from Up:	Shrinks the active window from the top between 1-50 steps	
Shrink Window From Right:	Shrinks the active window from the right between 1-50 steps	
Shrink Window From Below:	Shrinks the active window from the bottom between 1-50 steps	

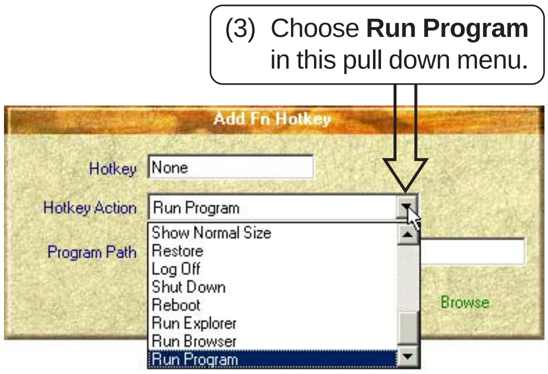
Actions	Descriptions	Examples (of action)
Minimize Window:	Minimizes the active window	
Maximize Window:	Maximizes the active window	
Show Normal Size:	Shows the active window in normal size (user adjustable)	
Restore:	Restores a minimized window to its previous size.	
Log Off:	Logs the current user OFF from the current Windows session and any connected networks.	
Shut Down:	Exits from Windows and turns OFF the Notebook PC.	
Reboot:	Restarts the Notebook PC	
Run Explorer:	Runs Windows Explorer	
Run Browser:	Runs the Internet Browser	
Run Program:	Runs a user defined program	

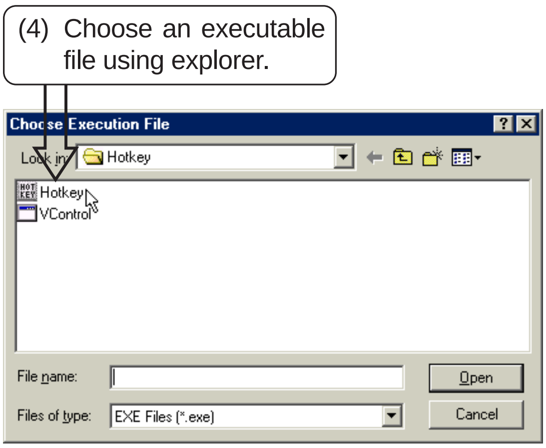
Adding a Program to Run

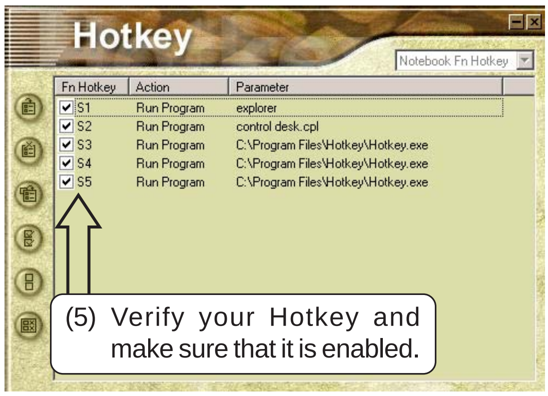
To add a Hotkey to run a program follow the steps below.











LiveUpdate

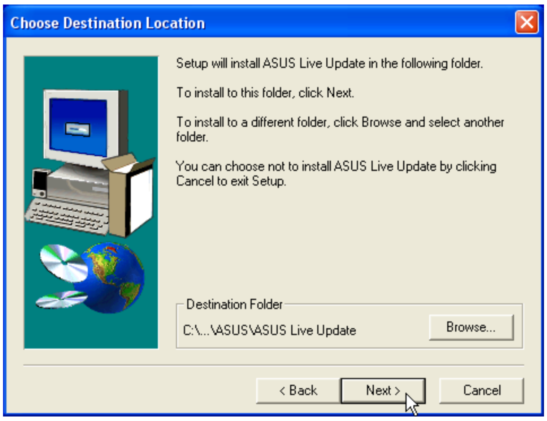
(Recommended utility)

Topics Covered:
LiveUpdate Setup
Using LiveUpdate

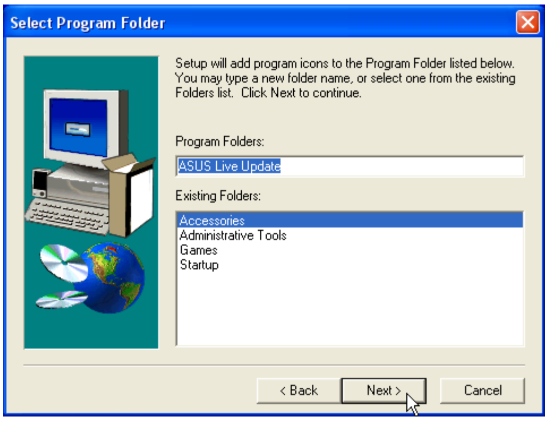
Screens will vary depending on your operating system but the contents should be the same.

LiveUpdate Setup

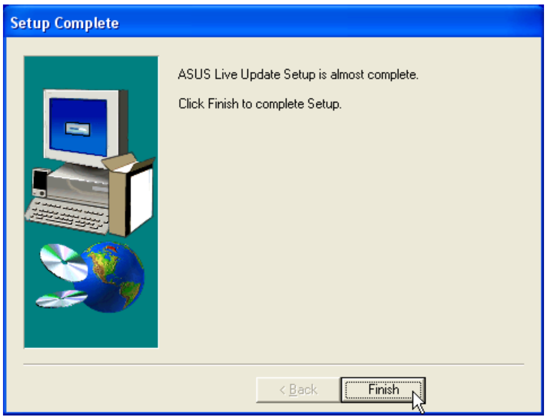
Running setup will give you the following wizard:



1. On the "Choose Destination Location" screen, click **Next** to continue or you may first change the destination folder.

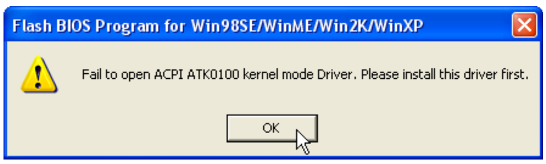


2. On the "Select Program Folder" screen, click **Next** to continue or enter a different folder name.

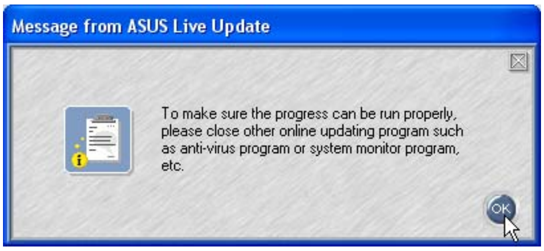


3. On the "Setup Complete" screen, click **Finish**.

NOTE: You cannot run this utility without first installing "ATK0100". You will be given this message if you do not have the driver installed.



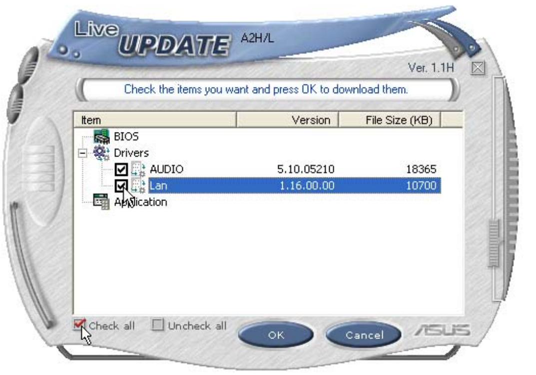
Using LiveUpdate



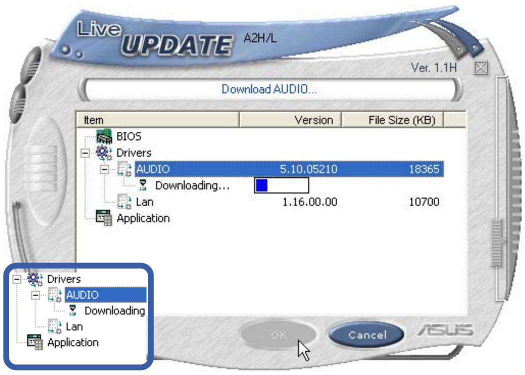
Close other software to ensure no conflicts.



Click **OK** to connect to the “Live Update” server.



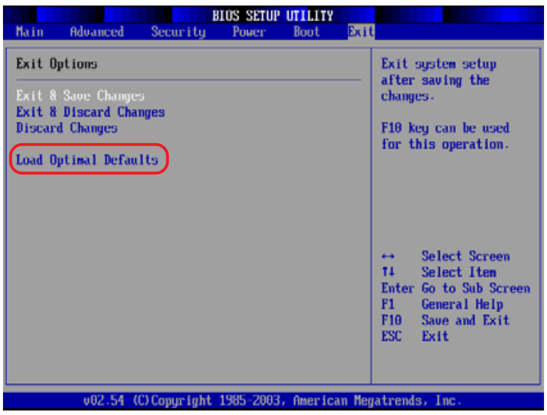
Newer versions will be shown. Check the items to update or select “Check all”.



Click **OK** to download and install the update.



When update is complete, click **OK** to exit.



You may be instructed to “reset your BIOS”. It entails pressing [**F2**] on bootup to enter BIOS setup and selecting **Load Setup Defaults**, and then **Exit Saving Changes** on the “Exit” menu.

PC-cillin 2002

(Recommended utility)

Topics Covered:

PC-cillin 2002 Features

About Viruses

Technical Support

PC-cillin 2002 Feature Screens

Screens will vary depending on your operating system but the contents should be the same.

Welcome to PC-cillin 2002

Trend Micro PC-cillin 2002 provides next generation secure computing for today’s personal computers. More than just antivirus software, PC-cillin includes a Personal Firewall, Site filter, Internet mail scanning, and more for all your secure computing needs.

Designed for the home or small office user, the friendly interface lets you quickly become familiar with all the powerful features of the software. However, the program behind the interface uses the latest technology and provides you with protection from the nastiest viruses, sneakiest Trojans, and the meanest hackers. With firewall technology, the Trojan System Cleaner tool, and more, PC-cillin gives you peace of mind whenever you connect to the Internet. And now that Trend Micro's award winning ICSA approved scan engine also includes ScriptTrap technology, personal computing has never been more secure.

Here's what PC-cillin will do "straight out of the box":

- Checks for viruses every time you open, copy, move, or save a file
- Protects against downloading infected files from the Internet or FTP sites
- Guards against malicious Java applets and Microsoft ActiveX controls while surfing the Web
- Detects and cleans live Trojans installed on your system
- Monitors your Microsoft Word and Microsoft Excel sessions for macro viruses, using MacroTrap
- Scans and cleans all files on your hard drive
- Scans all program files for viruses
- Checks all your saved documents for macro viruses

Here's what you can do with just a click of a button:

- Scan every file on your system and clean any infected files
- Scan any file from Windows Explorer or My Computer by right-clicking the file icon
- Scan floppy disks and clean any infected files
- Check all of your Word and Excel document(s) for macro viruses
- Scan your email attachments as they are being downloaded from an Internet (POP3) mail server
- Protect your computer against attacks from the Internet using a combination of cloaking and firewall functions
- Make whatever Web sites you want "off limits" to other users of the computer
- Protect your handheld devices with updated Personal Digital Assistant (PDA) virus pattern files

Personal Firewall

PC-cillin 2002 provides secure Internet computing with its new Personal Firewall feature. Easy to operate, the Personal Firewall protects your computer from unwanted Internet connections. The Personal Firewall is ideal for computers using always-on broadband (DSL, cable modem) connections, or for those computers that are often online. Even computers that only connect to the Internet for short periods of time are still vulnerable to hacker attacks and need protection.

With adjustable security levels, a trusted site list, and a port blocking function, the Personal Firewall gives you the control to keep your computer safe from malicious code like spyware and Trojan horses. The Personal Firewall is comprised of the following components:

Cloaking: Prevents your computer from being found. Cloaking hides the entry points (ports) of your computer making it appear to be disconnected from a network. Hackers using techniques like NetBIOS browsing, port scanning, or ICMP packet special processing will be unable to locate your computer.

Firewall: Provides a barrier between your computer and the network (LAN, Internet). This barrier examines and filters network traffic coming into your computer. By filtering network traffic, the firewall prevents malicious programs or files from entering your computer. The firewall protects against attacks hackers commonly use including: Ping of Death, IP conflict, SYN flooding, and others.

Trojan Backdoor Blocking: If a hacker has already broken into your system, he or she could have installed a Trojan (small hidden program) onto your computer (unlike viruses, Trojans do not replicate themselves, but can still wreak havoc on your system). To avoid being traced, the hacker can then use your computer to attack other computers. The Trojan Backdoor Blocking function prevents hackers from using your computer by blocking Back Orifice, Back Orifice 2000, Net Bus, Deep Throat and other known back door programs.

There may be Web sites that you know are safe and will not attack your computer. Using the Trusted Sites function, the Personal Firewall lets you add these safe sites to a list. Your computer can connect to any Web site on this list because they will not be filtered.

PC-cillin for Wireless

Malicious code and other threats hidden inside files, email, or on the Web can enter your Palm, Pocket PC, or EPOC device during beaming, synchronization, or Internet access. Trend Micro PC-cillin for Wireless provides portable, easy-to-use antivirus security for wireless devices; to defend against potential threats. Best of all, PC-cillin for Wireless is bundled with PC-cillin 2002 providing you with secure computing on both your desktop and handheld.

Trojan System Cleaner

PC-cillin automatically runs the Trojan System Cleaner (TSC) during initial installation, and every time Real-time Scan runs. The TSC detects the activity of Trojan horse programs, recovers system files which are modified by Trojans, stop their processes, and deletes files dropped from Trojans.

Traditional antivirus products only scan "files", they open files and check for virus code. But they don't check and clean system files and can't clean or delete Trojan horse programs (also known as Trojans) if it is already run in the system.

The TSC uses patterns to define how to clean a Trojan. These patterns are built into Trend Micro virus pattern files and are kept up-to-date. Whenever TSC is executed, it finds the newest pattern file and tries to read Trojan clean section from the pattern file.

ScriptTrap Technology

With the addition of ScriptTrap technology, PC-cillin now more than ever provides rock-solid protection for your computer. PC-cillin not only guards against harmful known script-based viruses ("I Love You" and "Anna Kournikova"), but can also protect your PC from new, unknown script-based threats.

Using the following processes, ScriptTrap automatically scans for scripting viruses based on "what they do" rather than how they are written:

lexical analysis- divides the script's source code into components, called tokens, based on punctuation and other keys.

semantic parsing- attempts to determine the meaning of each component.

Emergency Lock

PC-cillin also includes an Internet Emergency Lock function that lets you immediately disable all Internet activity if you suspect an attack. Enabling the Emergency Lock function immediately stops all traffic to and from the Internet.

User Interface

Designed for the home or small office user, the program's friendly interface quickly familiarizes you with the powerful features of PC-cillin 2002. The interface now includes a Simple and Standard mode. Using a tab interface, you can easily switch between the two modes.

Simple mode: Perform common PC-cillin tasks such as: view a simplified version of your system status, and scan all drives. In addition, you can update and register your software.

Standard mode: Access more advanced PC-cillin 2002 functions including: viewing your system status in more detail, selectively scanning folders, synchronizing your PDA, quarantining files, and viewing logs. In the Standard mode, as in the Simple mode, you can also update and register your software.

About Intelligent Update

Intelligent Update automatically searches for and downloads the latest files for PC-cillin 2002. This includes pattern and program files for both the main program and PC-cillin for Wireless. In addition, Intelligent Update ensures you have the latest Personal Firewall rules. This powerful function keeps PC-cillin and all its components updated; offering you maximum protection with minimal user intervention.

Once your computer is running, PC-cillin checks for an Internet connection. When this feature is enabled and your computer is online, PC-cillin automatically connects to the Trend Micro server to check if the latest update is available. If newer components are on the server, a pop-up window appears asking if you want to start downloading. If you choose not to download immediately, the pop-up window reappears in 10 minutes.

New product registration method

PC-cillin 2002 offers a new way to register your software online. On our Registration Web page, simply type your name and email address in the appropriate fields, receive your License Key via email, and insert it into the correct field on the Register Now screen of the PC-cillin window.

Registration only takes a few minutes and Trend Micro provides technical support, virus pattern downloads, and program updates for one year to all registered users, after which you must purchase renewal maintenance.

About viruses

A computer virus is a program that replicates. To do so, it needs to attach itself to other program files (for example, .exe, .com, .dll) and execute whenever the host program executes. Beyond simple replication, a virus almost always seeks to fulfill another purpose: to cause damage.

Called the damage routine, or payload, the destructive portion of a virus can range from overwriting critical information kept on your hard disk's partition table to scrambling the numbers in your spreadsheets to just taunting you with sounds, pictures, or obnoxious effects.

It is worth bearing in mind, however, that even without a "damage routine," viruses allowed to run unabated will continue to propagate--consuming system memory, disk space, slowing network traffic and generally degrading performance. Besides, virus code is often buggy and can also be the source of mysterious system problems that take weeks to understand. So, whether a virus is harmful or not, its presence on your system can lead to instability and should not be tolerated.

Some viruses, in conjunction with "logic bombs," do not make their presence known for months. Instead of causing damage right away, these viruses do nothing but replicate--until the preordained trigger day or event when they unleash their damage routines on the host system or across a network.

To learn more about any particular virus, or about viruses in general, you can access Trend Micro's online Virus Encyclopedia at: www.antivirus.com/.

How viruses are created

Until a few years ago, creating a virus required knowledge of a computer programming language. Today anyone with even a little programming knowledge can create a virus. Usually, though, misguided individuals who want to cause widespread, random damage to computers create viruses.

In the typical scenario, it is an individual, working alone, who writes a virus program and then introduces it onto a single computer, network server, or the Internet. Why? Ego, revenge, sabotage, and basic disgruntlement have all been cited as motivations. Recently, do-it-yourself "virus kits" have been popping up on the Internet, and macro scripts are becoming both easier to learn and more powerful, putting the capacity to engineer viruses in the hands of nearly everyone. In other words, no single, likely profile exists by which virus writers can be described or understood.

So whatever the reason one may have for writing a virus, the important thing is to make certain your company is not victimized, that data you are responsible for is safe, and that precious time is not wasted hunting down (and cleaning up after) viruses.

Accessing the Trend Micro Virus Encyclopedia

PC-cillin includes access to the online Trend Micro virus encyclopedia, organized by name and virus type. Use it to find out about tens of thousands of individual viruses, including the typical symptoms of a given virus, its infection procedure, and the damage routine.

With the growing prevalence of Macro viruses, we have bolstered the number of Macro virus descriptions included in the encyclopedia to well over 2000.

Of course, PC-cillin, which uses Trend’s award-winning, 32-bit, multi-threading scan engine, is capable of detecting all viruses that are known to be in circulation, plus the many thousands more that exist as "proof of concept" only in researcher's virus labs and on hacker's computers.

To access the Trend Micro Virus Encyclopedia, on the PC-cillin menu bar, click Security Info > Encyclopedia..

Viewing the Trend Micro Virus list

The Virus Information Center contains a list of the Real-time top ten viruses. In addition, you can view updated Security Alerts and Virus Advisories.

To access the Trend Micro Virus list, on the PC-cillin menu bar click, Security Info > Virus List.

Contacting Technical Support

Trend Micro provides technical support, virus pattern downloads, and program updates for one year to all registered users, after which you must purchase renewal maintenance.

Send an email to our highly trained technical support staff or visit our Web site to receive technical support.

Trend Micro Technical Support

Email: support@trendmicro.com

URL: www.antivirus.com

To speed up your problem resolution, when you contact our staff please provide as much of the following information as you can:

- Product serial number
- PC-cillin program, scan engine, pattern file, version number
- OS name and version
- Internet connection type
- Exact text of any error message given
- Steps to reproduce the problem

Before Contacting Technical Support

While our technical support staff is always pleased to handle your inquiries, there are a couple things you can do to quickly find the answer you are seeking.

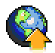
- Check the documentation: the manual and online help provide comprehensive information about PC-cillin. Search both documents to see if they contain your solution.
- Visit our technical support Web site: our technical support Web site contains the most up-to-date information about all Trend Micro products. Other inquiries that were already answered are also posted on the support Web site.

PC-cillin 2002 Feature Screens

PC-cillin 2002 Real-time Monitor

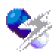
The Real-time Monitor is the quickest way to access certain functions, for example to display the PC-cillin or Settings windows. With the Real-time Monitor, you know at a glance if real-time scanning is enabled (the lightning streak icon is red) or disabled (the lightning streak icon is grey).


The Emergency Lock is activated. All incoming and outgoing Internet traffic is halted.


PC-cillin is connecting to the Trend Micro server to download the latest updates.


Your computer is currently under attack.


The real-time scanning function is enabled.


The real-time scanning function is disabled.

Configuration Screen

Double click the PC-cillin icon on the taskbar to bring up the real-time scan information page. Or right click and select “Configuration”.

The PC-cillin software has many features to protect you from Virus threats. Use the **Help** for more information.

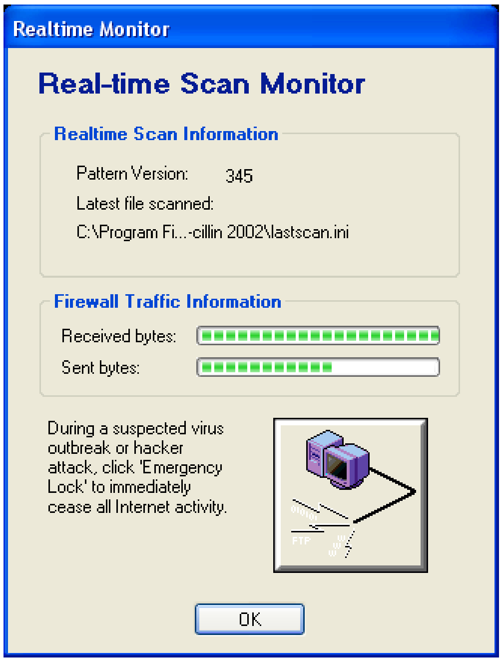


Real-time Status

Select “Real-time Status” by right clicking on the PC-cillin icon and you will bring up information on your virus pattern version, last scanned file, and network activity.

Stop Network Activity

Click the large button with a computer and broken network cable to stop all network activity if you suspect harmful activities are being made to your computer from the network.





PowerGear

(Required utility)

Topics Covered:

PowerGear Setup

Benefits of PowerGear

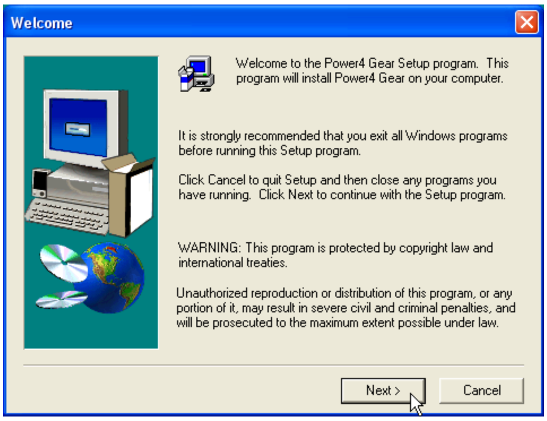
PowerGear Interface

PowerGear Configuration

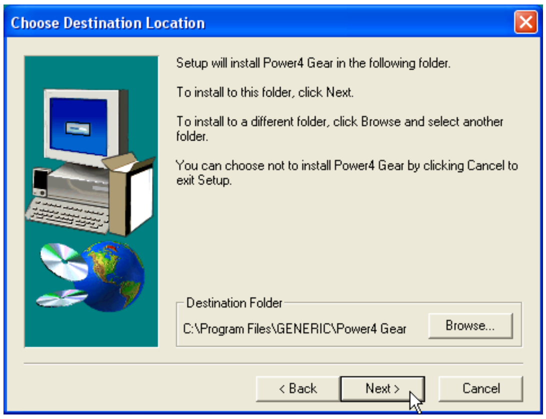
Screens will vary depending on your operating system but the contents should be the same.

PowerGear Setup

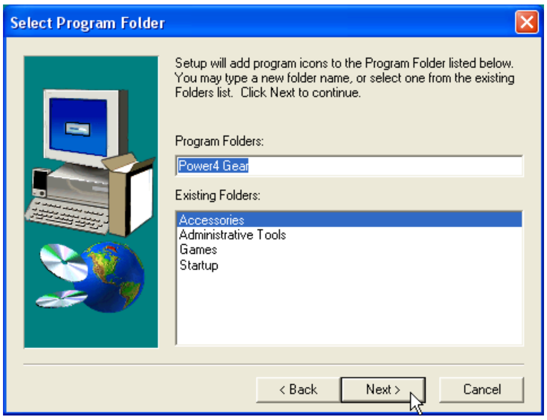
Running setup will give you the following wizard:



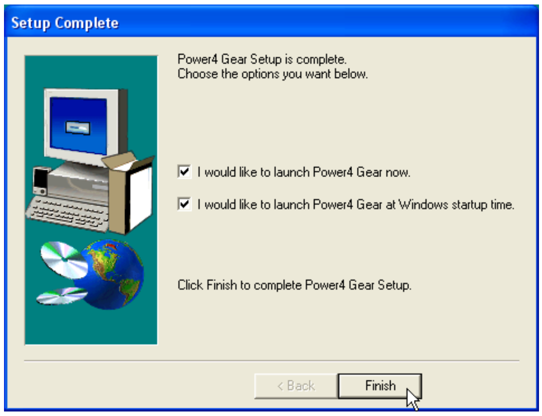
1. On the “Welcome” screen, click **Next** after reading the message.



2. On the “Select Program Folder” screen, click **Next** to continue or enter a different folder name.

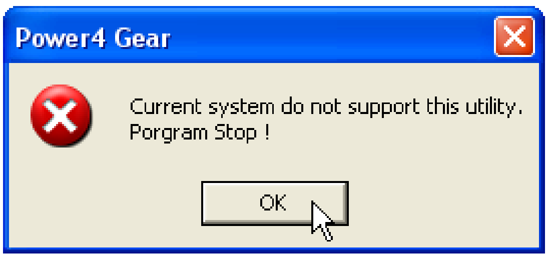


3. On the “Select Program Folder” screen, click **Next** to continue or enter a different folder name.



4. On the “Setup Complete” screen, click **Finish**.

NOTE: You cannot run this utility without first installing “ATK0100”. You will be given this message if you do not have the driver installed.



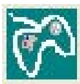
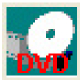
Benefits of PowerGear

PowerGear gives you control over power consumption items by allowing you to instantly “shift” from one power consumption scheme to another. The preferences or “gears” are shown below. You can change or “shift” gears by using the PowerGear button above the keyboard or by using the task bar icon. PowerGear can also be automatically activated when AC power is removed.

PowerGear Interface

Understanding the PowerGear buttons

Press the PowerGear button above the taskbar to shift between the four gears as labeled below. The icon may vary depending on your Notebook PC model.

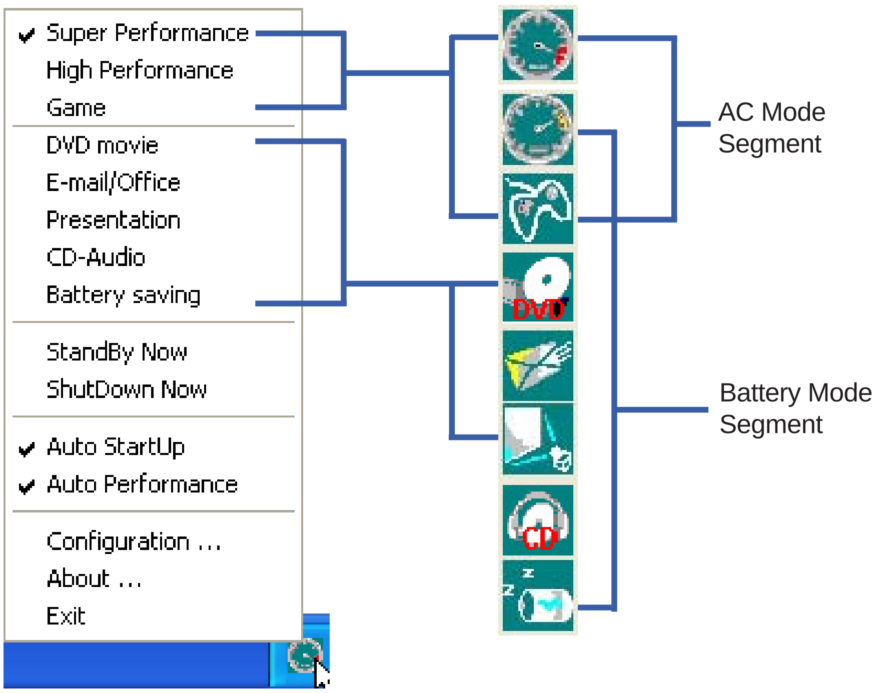
Icons	Mode Names	Power Segment
	Super Performance	AC
	High Performance	AC/DC
	Game Performance	AC/DC
	DVD Movie Performance	DC
	Email/Office Performance	DC
	Presentation Performance	DC
	Audio Listening Performance	DC
	Battery-Saving Performance	DC

Using the task bar icon

Right-click the icon on the taskbar for quick access to PowerGear settings.

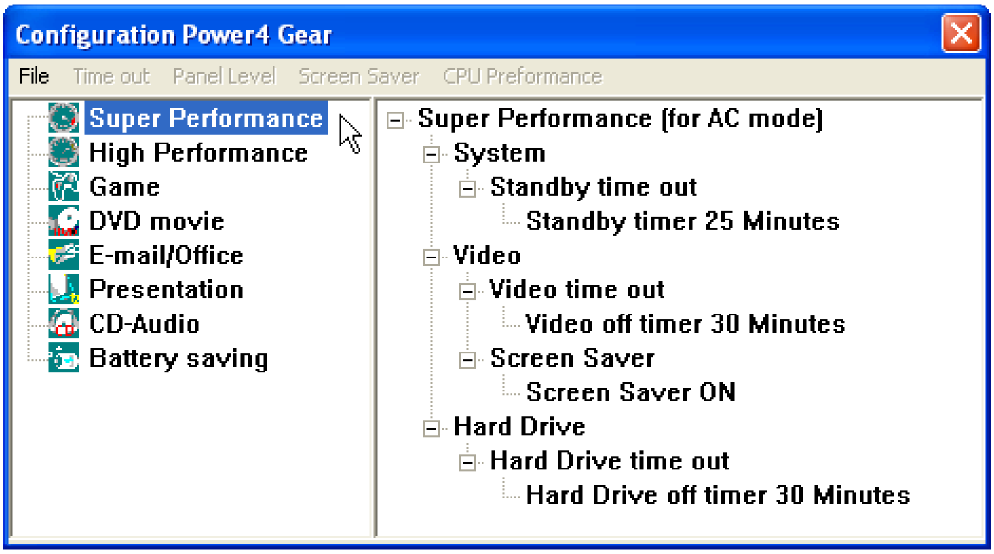
PowerGear Modes and Power Segments

When you are using an AC adapter, the PowerGear button will allow switching between three modes as shown above. When you remove the AC adapter, the PowerGear button will allow switching between seven modes as shown above. When you remove or apply the AC adapter, PowerGear will automatically shift you up or down into the proper mode segment.



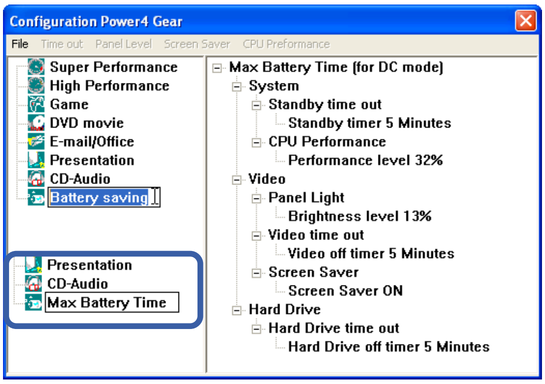
PowerGear Configuration

Double click an item to bring up a menu of selections and click on a value to change. To save, select "Save Configuration" form the "File" pull-down menu. If you did not save, you will be prompted to when you exit.



Renaming Settings

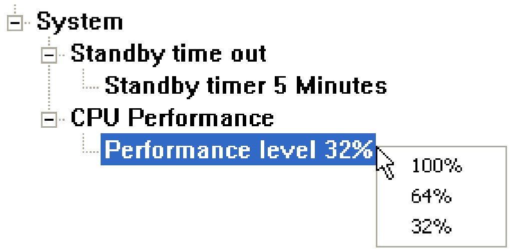
You can rename the power saving levels as you like using the same method to rename files or folders in Windows. In the example on the right, the brightness level is decreased to 13% and the name is changed to "Max Battery Time".



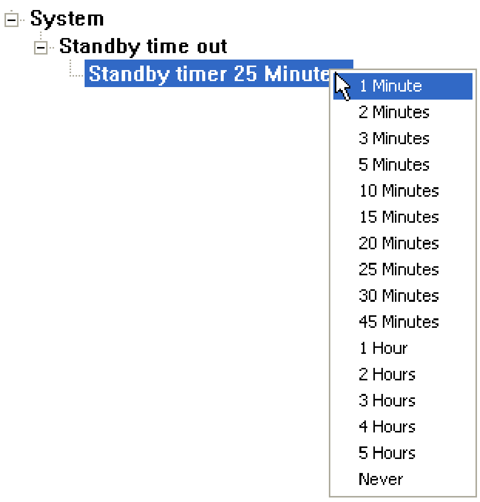
Power Saving Details

Double click an item to view possible settings. Some power saving items are only available under certain modes.

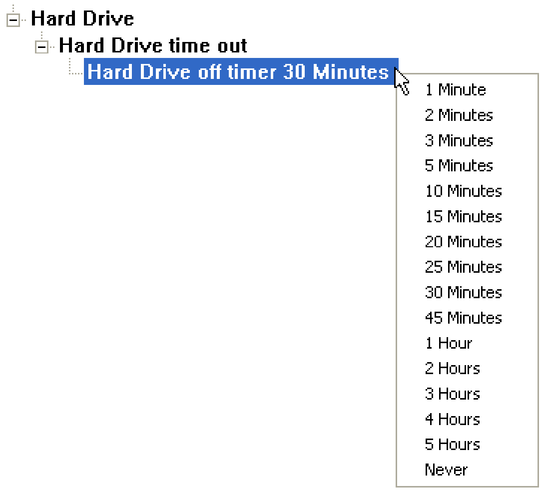
CPU Performance



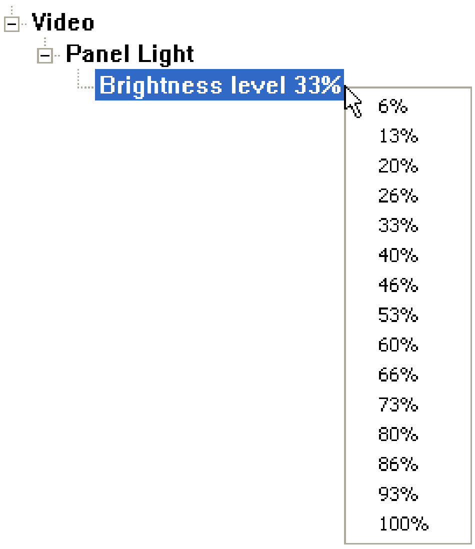
System Standby Timer



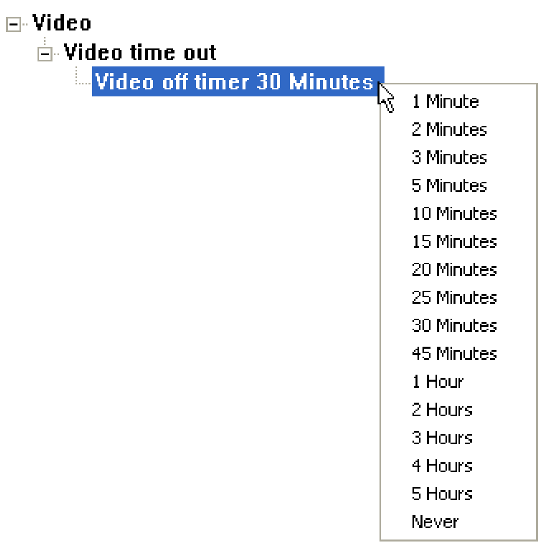
Hard Drive Off Timer

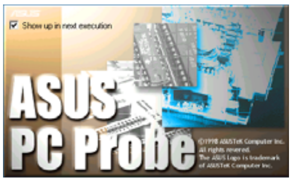


Display Panel Brightness



Display Panel Off Timer





Probe2

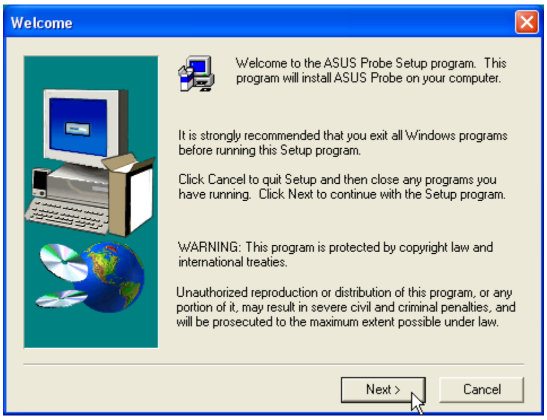
(Recommended Utility)

Topics Covered:

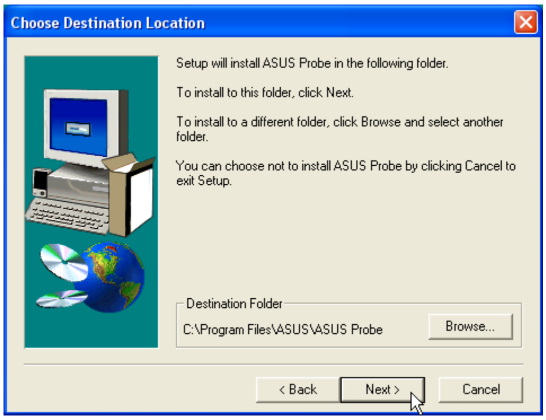
Screens will vary depending on your operating system but the contents should be the same.

Probe2 Setup

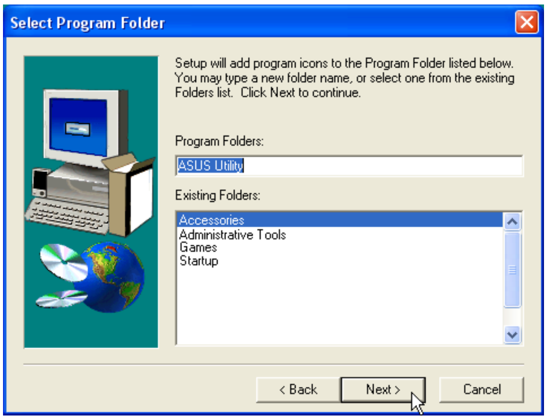
Running setup will give you the following wizard:



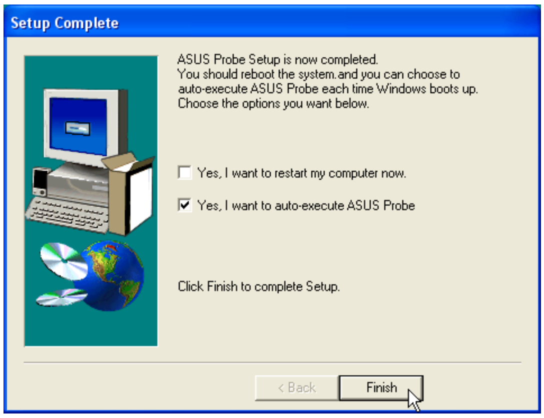
1. On the “Welcome” screen, click **Next** after reading the message.



2. On “Choose Destination Location” , click **Next** to continue or enter another destination folder.



3. On the “Select Program Folder” screen, click **Next** to continue or enter a different folder name.



4. On the “Setup Complete” screen, click **Finish**.

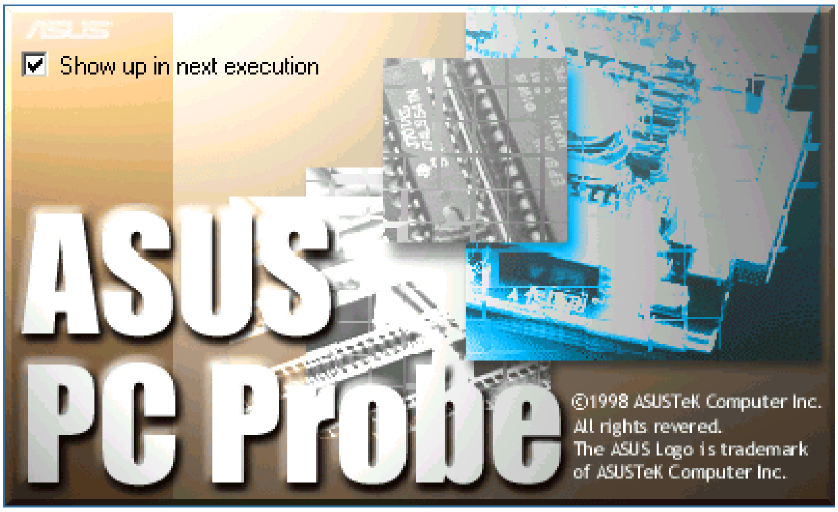
Probe2 Reference

Probe2 is a convenient utility to continuously monitor your computer system's vital components, such as fan rotations, voltages, and temperatures. It also has a utility that lets you review useful information about your computer, such as hard disk space, memory usage, and CPU type, CPU speed, and internal/ external frequencies through the DMI Explorer.

Starting Probe2

If the Probe2 icon (magnifying glass) is not shown on the taskbar (see below), click the Windows **Start** button, point to **Programs**, and then **ASUS Utility**, and then click **Probe VX.XX**.

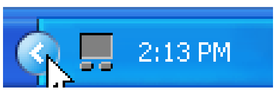
When Probe2 starts, a splash screen appears allowing you to select whether to show the screen again when you open Probe2 or not. To bypass this startup screen, clear the **Show up in next execution** check box.



The Probe2 icon  will appear on the taskbar's system tray indicating that Probe2 is running. Clicking the icon once will allow open the Probe2 interface.

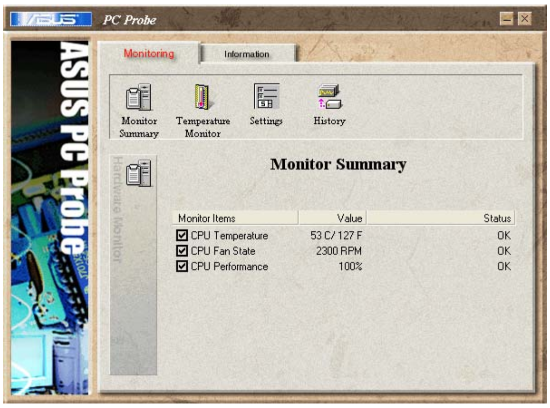
Windows XP Taskbar

Windows XP will hide taskbar items. Click the arrow to show running services.



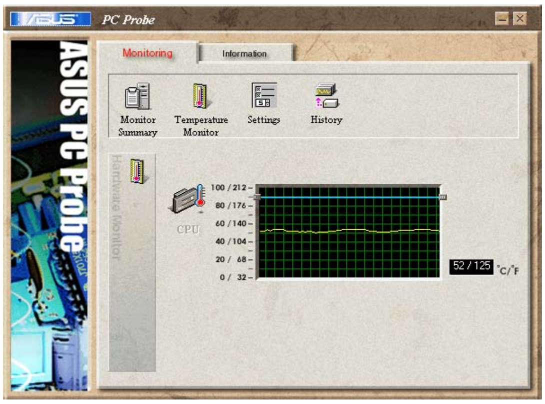


Using Probe2 Monitoring



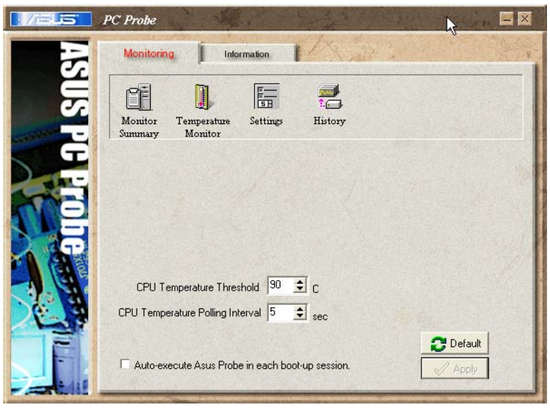
Monitor Summary

Shows a summary of the items being monitored.



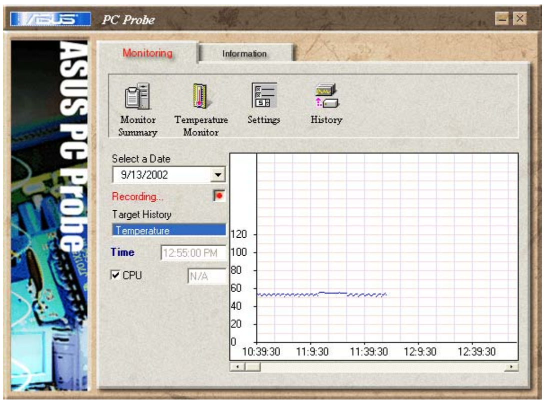
Temperature Monitor

Shows the PC's temperature.



Settings

Lets you set threshold levels and polling intervals or refresh times of the PC's temperature, fan rotation, and voltages.

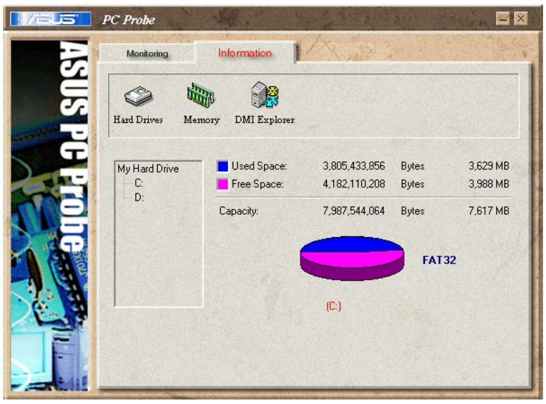


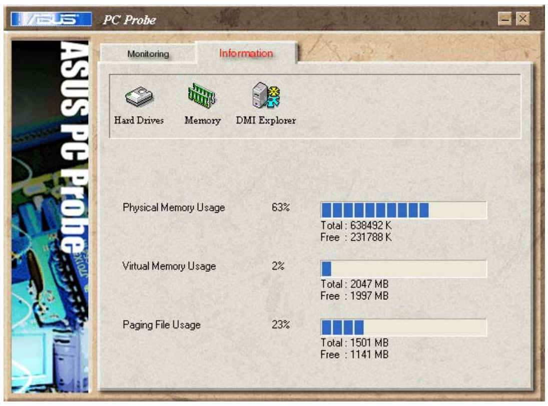
History

Lets you record the temperature monitoring activity by date, time, and target history. Click the record button and select a date. To view a previous recording, simply choose that date.

Using Probe2 Monitoring (Cont’)

Information





Hard Drives

Shows the used and free space of the PC’s hard disk drives and the file allocation table or file system used. Information on other hard drives can be accessed by clicking on the relevant drive letter.

Memory

Shows the PC’s memory load, memory usage, and paging file usage.

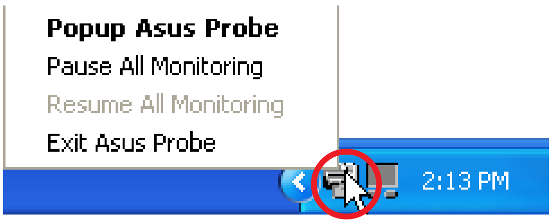


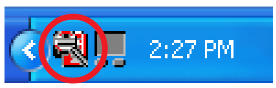
DMI Explorer

Shows information pertinent to the PC, such as CPU type, CPU speed, and internal/external frequencies, and memory size.

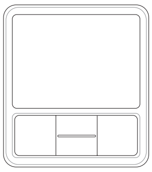
Probe2 Taskbar Icon

Right clicking the Probe2 icon will bring up a menu to open or exit Probe2 and pause or resume all system monitoring.





When the Probe2 senses a problem with your PC, portions of the Probe2 icon changes to red and audio alerts will be heard from the speaker.



TouchPad

(Recommended Utility)

<u>Topics Covered:</u>

TouchPad Setup
Overview of the TouchPad
Scrolling Properties Page
Tap Zones Properties Page
More Features Properties Page
Button Actions Properties Page
Touch Properties Page
Edge Motion Properties Page
Frequently Asked Questions

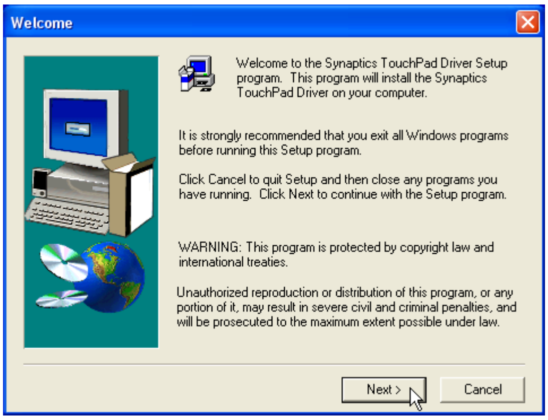
Screens will vary depending on your operating system but the contents should be the same.

Touchpad Setup

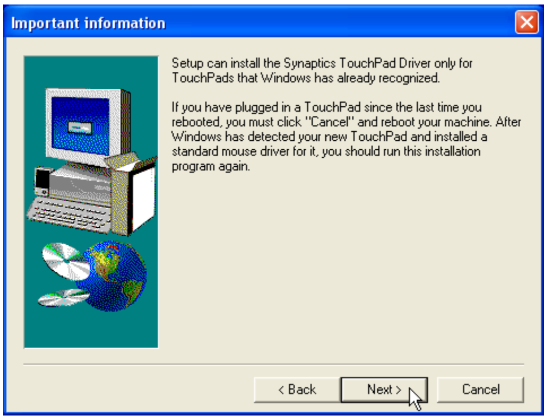
Running setup will give you the following wizard:



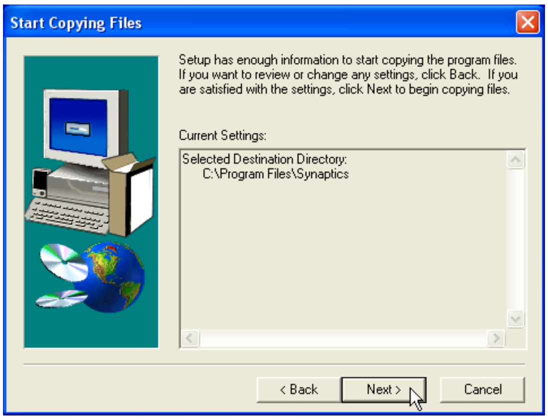
1. On the "Choose Setup Language" screen, select a language and click **OK** to continue.



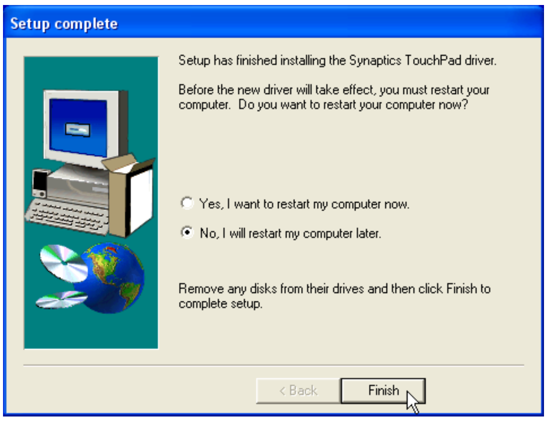
2. On the "Welcome" screen, click **Next** after reading the message.



3. On the "Information" screen, click **Next** after reading the message.



4. On the "Start Copying Files" screen, click **Next** after checking the current settings.



5. On the "Setup Complete" screen, select "No,..."and click **Finish**.

Synaptics® TouchPad Features

Your Synaptics TouchPad is much more powerful than an old-fashioned mouse. In addition to providing all the features of an ordinary mouse, your TouchPad allows you to:

- Tap on the Pad Instead of Pressing the Buttons
- Drag Icons, Windows and Other Objects without Using Buttons
- Adjust the Overall Touch Sensitivity
- Customize Buttons and Taps
- Prevent Accidental Pointing While Typing (also known as Palm Check)
- Scroll Through a Document Without Using Scroll Bars
- Zoom In/Out and Pan on Documents
- Move the Pointer Long Distances
- Fine Tune the Pointer Movement

Tap on the Pad Instead of Pressing the Buttons

Tapping on the surface of the pad is the same as clicking the left mouse or TouchPad button (i.e. the primary TouchPad button). Tapping is usually quicker and more convenient than using the button. To double-click, just tap twice. A light, quick tap works best; very hard or very slow taps are less likely to work.

Drag Icons, Windows and Other Objects without Using Buttons

Often, you need to hold the mouse or TouchPad button down while moving the pointer (to move an icon or window around the screen, for example). This action is called dragging. Just like clicking and double clicking, you can also drag without using the button.

To move or drag an object (equivalent to pressing and holding the left TouchPad button):

1) Position the pointer over the object and tap twice, down-up-down, leaving your finger on the TouchPad on the second tap. This action is sometimes called tap-and-a-half.
2) Now move the selected object by sliding your finger across the TouchPad surface.
3) Lift your finger to drop the object.

Tap-and-a-Half

You might wonder what happens when you reach the edge of the pad and you are dragging an object. The Synaptics TouchPad has a feature called Locking Drags. This feature allows you to lift your finger from the pad without ending the drag. You can drag an object across the screen using several finger strokes. To end a Locking Drag action, tap again. The Synaptics TouchPad also has a feature called Edge Motion to help with long distance dragging. See Move the Pointer Long Distances for details.

The Tap and Drag and Locking Drags features are located on the Touch Properties Page in the Mouse Properties dialog.

Adjust the Overall Touch Sensitivity

You can control how much finger pressure you must apply before the TouchPad responds by adjusting the Touch Sensitivity slider. This slider is located on the Touch Properties Page in the Mouse Properties dialog.

At higher (more sensitive) Touch Sensitivity settings, the TouchPad recognizes even a very slight touch. If you see undesired or erratic pointer motion, try a lower setting. Lower (less sensitive) settings require a firmer touch to move the pointer. In general, a lighter touch works best.

Customize Buttons and Taps

Most TouchPads come with two buttons that work just like traditional mouse buttons. You can customize the behavior of these buttons.

Tapping on the TouchPad surface also performs the same action as pressing a button. Tapping in the center of the pad will always produce a left-click (the action of the primary button), but you can configure each of the four corners of the TouchPad surface to act as different buttons. These special corner regions are called tap zones . With four corner tap zones, the center of the TouchPad, and the two physical buttons you can turn your TouchPad into a seven-button mouse!

A customization example:

Suppose you want to use your TouchPad like a three-button mouse. You can configure the left TouchPad button to produce middle clicks when pressed. Remember that tapping on the TouchPad will produce left clicks, and pressing the right TouchPad button will produce right clicks. For additional convenience, you can configure the top right corner tap zone of the TouchPad to produce right clicks. Looking at the TouchPad surface in the picture below, taps in the top right corner (the red shaded area) will produce right clicks, but tapping anywhere else on the TouchPad (the solid gray area) produces left clicks.

An Example TouchPad

There are many different actions that you can assign to the buttons and tap zones. The following actions are provided as built-in features with the Synaptics TouchPad device driver. Additional actions might be available if you have installed any third-party TouchPad Plug-In software.

- Jump to the Start Button. This action causes the pointer to jump to the Start button in the Windows task bar and automatically opens the Start Menu.
- Jump to the current application’s menu. This action causes the pointer to jump to the left-most entry in the application’s window menu (usually the File menu) and automatically pops up the submenu.
- Minimize the current application. This action minimizes the current application’s window. If the current application’s window is already minimized, this action will restore it to its normal size and location.
- Maximize the current application. This action maximizes the current application’s window (expands it to cover the full screen). If the current application’s window is already maximized, this action will restore it to its normal size and location.
- Run a program of your choosing. This action allows you to specify the name of any program you want to run automatically when you click the button or tap in the tap zone.

To customize taps and buttons, go to the Button Actions Properties Page in the Mouse Properties dialog.

Prevent Accidental Pointing While Typing

Unintentional pointer movement and accidental taps can be caused by accidentally brushing the surface of the TouchPad with your palm or another part of your hand. The results of this contact can be observed as a changing cursor location when typing, causing subsequent text to appear in the wrong place. Or text may "spontaneously" be highlighted and replaced. Most often, this unwanted pointing activity occurs when typing on the keyboard. The TouchPad can detect and prevent accidental and unwanted pointer movement while you are typing.

If you see unwanted pointer movement occurring while you are typing, you can adjust the Palm Check slider located on the Touch Properties Page in the Mouse Properties dialog. Move the slider thumb to the right towards Maximum. Now accidental brushes of your hand on the TouchPad while you are typing are more likely to be ignored.

On the other hand, in the midst of typing, you might purposefully use the TouchPad to point and click, and sometimes the TouchPad may not seem to respond. In this case, move the slider thumb to the left towards Minimum. Now pointing during typing is less likely to be interpreted as an accidental brush with the pad surface, and will not be ignored.

Scroll Through A Document without Using Scroll Bars

Virtual Scrolling allows you to perform a very common task – scrolling documents – without having to move the pointer away from your work. By simply sliding your finger up and down the right edge of the TouchPad, the contents of the current window will scroll vertically. Similarly, by sliding your finger left and right along the bottom edge of the TouchPad, the contents will scroll horizontally. You no longer need to laboriously maneuver the pointer to the small scroll bar elements; you can scroll no matter where the pointer happens to be.

Virtual Scrolling works with document windows (like word processors and spreadsheets), and it also works with file lists, font lists, and other scrollable items. As a rule, you can use Virtual Scrolling when you are working in any window that has a scroll bar.

And Virtual Scrolling does more than just make scrolling more convenient. It also can make scrolling smoother. When you scroll by dragging the scroll thumb with the mouse, many applications do not re-display the document window until you release the mouse button. Virtual Scrolling makes navigation through documents easier, because it forces the application to re-display the window contents as you scroll.

How do I use Virtual Scrolling?

To customize the Virtual Scrolling feature, go to the Scrolling Properties Page located in the Mouse Properties dialog.

Zoom In/Out and Pan on Documents

Note that zooming and panning only work in applications that support the Microsoft Intellimouse. With Intellimouse aware applications, you can zoom and/or pan to quickly maneuver your way through lengthy documents. To jump to a distant location within your document, zoom out, click on the desired location, then zoom in. To scroll horizontally and vertically at the same time, simply pan in a diagonal direction!

Move the Pointer Long Distances

Suppose you are dragging an object, scrolling at high speed (via Virtual Scrolling!), or merrily moving the pointer when you suddenly reach the edge of your TouchPad. Don't despair, the Synaptics TouchPad Edge Motion feature comes to the rescue! Edge Motion helps with long distance pointer motion. When you reach an edge of the TouchPad, the pointer (or scroll thumb when Virtual Scrolling) continues to move in the same direction until you lift your finger from the TouchPad or move your finger away from the edge.

Edge Motion speed can be pressure-sensitive or constant. Pressure-sensitive speed means that the harder you press, the faster the object or pointer moves.

You can configure the Edge Motion feature on the Edge Motion Properties Page in the Mouse Properties dialog.

Fine Tune the Pointer Movement

The Synaptics TouchPad has many additional features to help you control the way your pointer moves. Please take a look at the list of additional features.

Accessories

Your TouchPad is a productivity enhancing tool, designed for serious work. But we think it should also be fun. We have included two fun application programs that demonstrate some of the capabilities of the TouchPad: Pressure Graph and The Incomparable, Mysterious Synaptics MoodPad.

To run these applications, click once on the Synaptics TouchPad Icon in the Taskbar, go to the Accessories menu and select the desired application.

More About the TouchPad

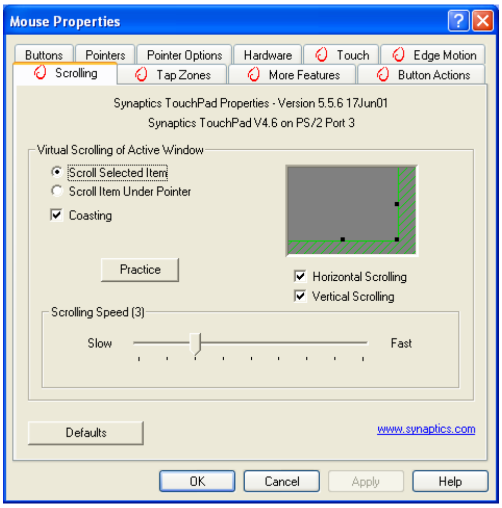
The TouchPad detects your finger by capacitive sensing (it is not sensitive to heat or applied force). As your finger approaches the pad, it alters the electric field in the vicinity of the pad surface. The TouchPad sensor is just a circuit board with a matrix of conductive traces printed on the top surface. A special chip on the back side of the TouchPad continuously measures the capacitance of these traces, and thus can determine the presence and location of your finger.

To get the most out of your TouchPad, be sure that the TouchPad driver software is installed. If the Synaptics TouchPad driver is properly installed, the Mouse Properties dialog will include several TouchPad tabs along the top in addition to the standard mouse tabs.

Property Pages

The property pages allow you to customize TouchPad settings for your Notebook PC. The following pages will describe each property page with the Synaptics logo. The "Buttons", "Pointers", and "Pointer Options" pages come with Windows and should be described in Windows documentation.

Scrolling Properties Page



The Scrolling properties page allows you to customize the Virtual Scrolling capabilities of your TouchPad.

In some applications, the scroll zones which activate Virtual Scrolling can be used for zooming too.

Enabling Virtual Scrolling of the Active Window

Check the appropriate boxes on this page for the type of Virtual Scrolling that you prefer:

- Horizontal Scrolling
- Vertical Scrolling
- Coasting

Choose where you want Virtual Scrolling to occur:

- Scroll Selected Item

- OR -

- Scroll Item Under Pointer

Customizing Scroll Zone Sizes

This page includes a small map of the TouchPad with the scroll zones shaded in red. See the Scroll Zone TouchPad Map for a more detailed description.

You can adjust the size of each zone by dragging one of the black resize handles on the TouchPad map. If you are having trouble activating the Virtual Scrolling feature, you might want to try making the scroll zones wider. If you find that scrolling sometimes gets activated when you didn't mean to scroll, try narrowing the scroll zones.

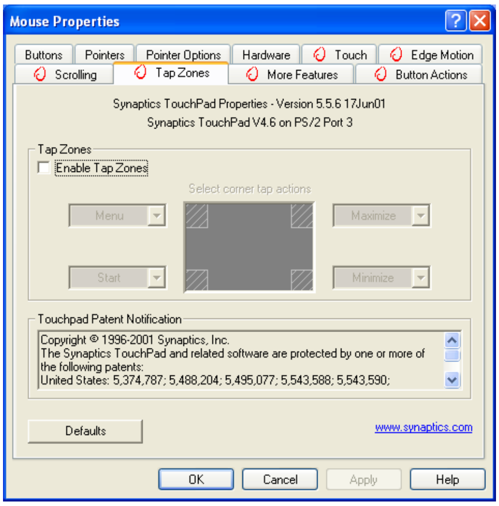
Customizing Virtual Scrolling Speed

You can control the speed of Virtual Scrolling by adjusting the Scrolling Speed slider on this page. Drag the slider thumb to the right for faster scrolling.

Tap Zones Properties Pages

The Tap Zones properties pages allow you to assign custom actions to taps in the Touchpad's corner zone regions (or tap zone regions).

The Synaptics TouchPad driver may also control other pointing devices attached to your system. If the Synaptics TouchPad driver is controlling more than one pointing device on your system, the Synaptics pages on the Mouse control panel will have a drop-down box listing all of the pointing devices that are controlled. You may set separate settings for each by selecting the appropriate device (settings which don't apply to a particular pointing device will be grayed out).



Customizing the Tap Zones

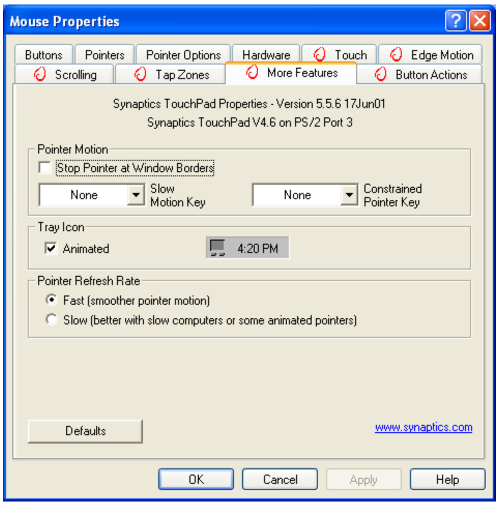
When the tap zones are enabled, each tap inside a corresponding tap zone region on your TouchPad can have a different meaning or action. For example, you can define the upper right corner tap zone to mean right clicks. Then when you tap your finger on the upper right corner of your TouchPad, it is as if you are clicking the right mouse or TouchPad button.

This page includes a small map of the TouchPad with the active tap zones shaded in red. Next to each zone is a text box specifying the action for that zone.

To Customize:

1. To activate the corner tap zones, check the box next to the text Enable Tap Zones. An unchecked box means that all taps on every part of the TouchPad surface will have left-click behavior.
2. To change an action for a particular zone, locate the text box nearest the zone. The text box displays the current action for this zone (for example, it might say No Zone which means that this particular zone is disabled and any taps here will produce the default left-click action). Click on the down arrow button located to the right of the text to display a list of actions. Select the desired action.
3. Each tap zone can be resized to be as large or as small as you desire by dragging one of the black resize handles located on the TouchPad map.

More Features Properties Page



The More Features properties page allows you to control the following features of you Synaptics TouchPad:

Stop Pointer at Window Borders

This feature constrains the pointer to stay inside the active window. When you try to move the pointer outside the window, it stops at the edge. If you try a second time, the pointer is free to leave the window.

Stopping the pointer at the window borders makes it easy to access controls that lie around the edges of windows. For example, to close or resize a window, you can casually toss the pointer in the general direction of the close box or the edge of the window, and the pointer will stop exactly where you want it.

Snap to Default Button

This feature automatically moves the pointer to the Default Button when a dialog box appears on your screen.

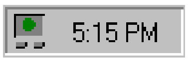
Slow Motion Key

Sometimes you might need more accuracy when pointing with the TouchPad, such as in a drawing program. The speed of the pointer can make this type of accuracy difficult to obtain. To slow down the pointer movement, you can specify a slow motion key. Then, for slow pointer movement, press and hold this key as you move the pointer.

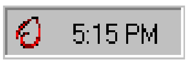
Constrained Pointer Key

At times you may want to restrict the pointer to move only horizontally or only vertically. You can specify a constrained pointer key, then press and hold this key as you move the pointer. The initial pointer direction when holding this key determines whether the pointer is constrained to move only horizontally or only vertically.

Synaptics TouchPad Tray Icon



The Synaptics TouchPad tray icon appears in the Windows Taskbar near the clock. You can choose between two icons:

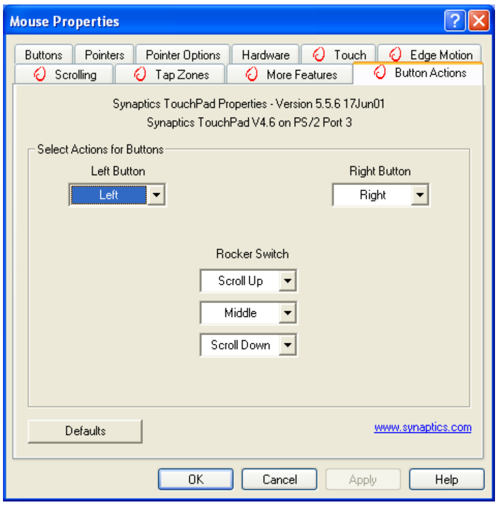


This is the animated Touch Meter icon. The size of the dot on the touch meter indicates the amount of finger pressure. The icon turns blue while Virtual Scrolling is in progress.

This is the non-animated Synaptics logo icon.

You can access the “TouchPad Properties” dialog by double clicking on either tray icon.

Button Actions Properties Page



The Button Actions properties page allows you to customize the physical buttons of your TouchPad.

The **Rocker Switch** settings are available on Notebook PC's with scroll buttons between the left and right buttons.

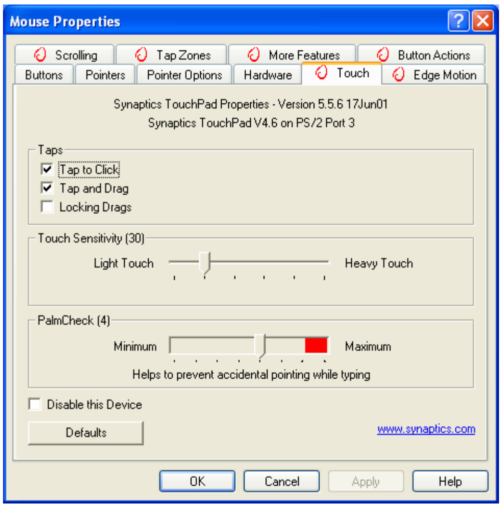
Customizing Button Assignments

You can customize the TouchPad buttons in the same way that you customize the tap zones.

To Customize:
Each button has a text box that displays the current action (for example, it might say Left, which means the left-click or primary-click action). To display a list of possible actions, click on the down arrow button located to the right of the text. Select the desired action.

Touch Properties Page

The Touch properties page allows you to customize the tap response and sensitivity of your TouchPad.



Taps

Check the appropriate boxes in the Taps section of the Touch Properties Page for the tapping capabilities that you prefer:

- Tap to Click
- Tap and Drag
- Locking Drags

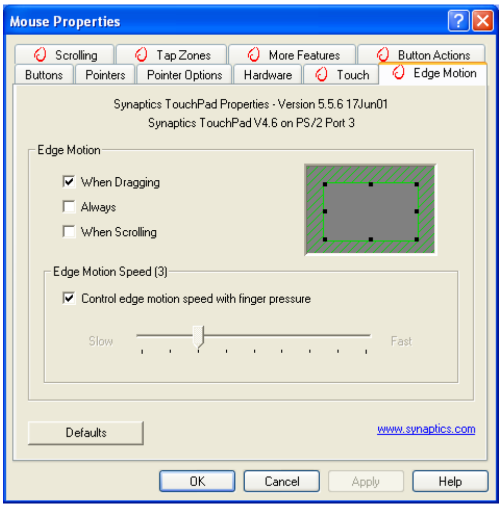
Touch Sensitivity

Use the Touch Sensitivity slider to control how much finger pressure you must apply before the TouchPad responds. See Adjust the Overall Touch Sensitivity.

Palm Check

The Palm Check slider controls the TouchPad's detection of accidental and unwanted pointing movement. In addition to detecting palm contact with the TouchPad, the TouchPad can ignore much of the accidental and unwanted pointer movement that may occur while typing (due to accidentally contacting your TouchPad). See Prevent Accidental Pointing While Typing for more details.

Edge Motion Properties Page



The Edge Motion properties page allows you to customize the long distance pointer motion capabilities of your TouchPad. When your finger reaches the edge of your TouchPad, the Edge Motion feature allows the pointer to continue to move until you lift your finger. See Move the Pointer Long Distances for more details about the Edge Motion feature.

Enabling Edge Motion

Check the appropriate boxes on this page for the types of Edge Motion that you desire:

- When Dragging
- Always
- When Scrolling

Customizing Edge Zone Sizes

This page includes a small map of the TouchPad with the edge zones shaded in red. See the Edge Zone TouchPad Map for a more detailed description. You can adjust the size of each zone by dragging one of the black resize handles on the TouchPad map. If you are having trouble activating the Edge Motion feature, you might want to try making the edge zones wider.

Customizing Edge Motion Speed

During Edge Motion, the speed at which the pointer (or dragged object or Virtual Scrolling scroll thumb) moves can be pressure-sensitive or constant. With pressure-sensitive speed, the harder you press the faster the object or pointer moves. For this type of speed, check the box labeled Control edge motion speed with finger pressure.

If you prefer a constant speed for Edge Motion, you can adjust the speed with the Edge Motion speed slider located on this page.

Frequently Asked Questions

Q: When I use Virtual Scrolling, the pointer jumps over to the scroll bar, and then jumps back where it came from when I'm done. Is this normal?

A: Yes.

Q: Why doesn't the Virtual Scrolling feature work in some windows, even though they have a scroll bar?

A: In order to scroll, Virtual Scrolling must be able to "see" the window's scroll bar. If the scroll bar is partially obscured by another window, or partially off the screen, then Virtual Scrolling will not activate in that window. In general, a window's scroll bar must be entirely on the screen, and fully visible, in order to use Virtual Scrolling in that window. There is an exception to this rule: Virtual Scrolling has "special knowledge" about many common types of windows, and can scroll them even if their scroll bars are not visible on the screen. A very small number of applications use nonstandard scroll bars that might not work reliably with Virtual Scrolling.

Q: Why do some windows scroll smoothly, while others re-display their contents only occasionally as I scroll?

A: The way a window responds to its scroll bars is entirely up to the application which owns that window. Some applications "smooth-scroll," while others wait until you release the scroll bar before updating their contents. Virtual Scrolling "knows" about many common applications and window types, and uses this knowledge to "trick" many windows into smooth-scrolling (Microsoft ® Word ™ document windows, for example, do not normally smooth-scroll, but they do when you use Virtual Scrolling). If Virtual Scrolling does not "know" about a particular type of window, it still approximates smooth-scrolling by causing the window to re-display when your finger slows down or stops. This can help you more accurately scroll to the right place in a document.

Q: Why does the scroll thumb sometimes "jump around" when I scroll, and not go exactly where the pointer is?

A: Again, the application actually has complete control over the way the scroll thumb moves. Depending upon the window contents, some applications will actually prevent you from moving the scroll thumb to certain locations. Sometimes, the scroll thumb is only "allowed" to come to rest at one or two positions along the scroll bar! In these cases, even if you were to manually drag the scroll thumb with the pointer, you would find that it would "jump" to a final location when you released it. Virtual Scrolling, unfortunately, cannot control how applications manage their scroll bars.

Frequently Asked Questions (Cont')

Q: Why doesn't Virtual Scrolling work properly with Microsoft Internet Explorer?

A: Make sure you are using Internet Explorer version 4.01 or later, and that the Use Smooth Scrolling option on the Advanced page of the Internet Explorer Properties dialog is NOT checked.

Q: When I press and hold the shift key or the control key (CTRL), the pointer movement is either very slow or restricted to move only horizontally or only vertically. What is happening?

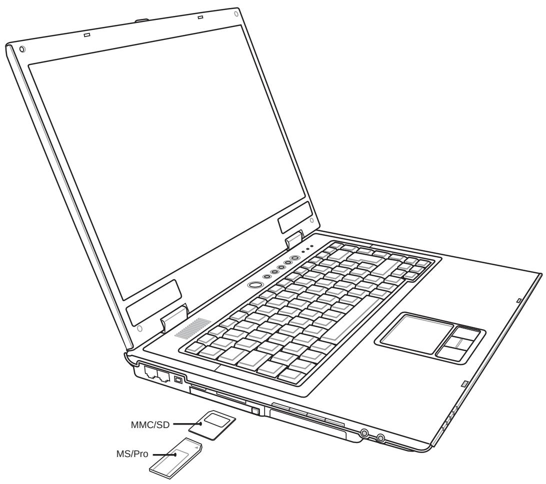
A: The shift keys and the control keys are special and are used for various things, such as selecting multiple files in Microsoft Windows Explorer or for zooming in and out on a spread sheet in Microsoft Excel. These keys can also be used for special pointer movement, such as for slowing the pointer down or for constraining the pointer to move only horizontally or only vertically. For example, you can assign the left shift key to be the Slow Motion Key. Then when you press and hold the left shift key, the pointer motion will be slower than usual. Note that you can still use this shift key for other special behaviors! You can still press and hold the left shift key to select multiple files in Microsoft Windows Explorer, but the pointer motion will also be a bit slower. If you see slow or constrained pointer movement when pressing shift or CTRL and you want to turn off this special behavior, go to the More Features Properties Page in the Mouse Properties dialog and uncheck the appropriate boxes.

WINFLASH

WinFlash

(Recommended Utility)

<u>Topics Covered:</u>
WinFlash Setup
Using WinFlash

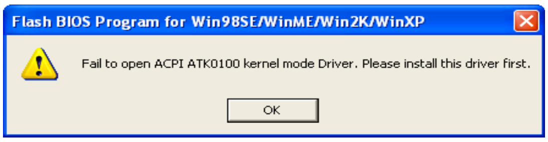


After the memory reader driver is installed, you can read or write to various memory types. See the hardware manual for information on supported memory types.

Screens will vary depending on your operating system but the contents should be the same.

WINFLASH Setup

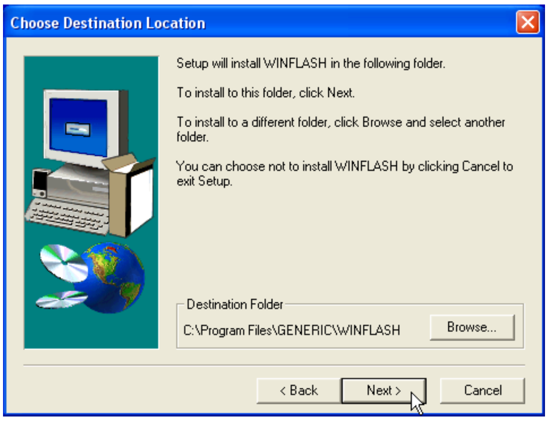
Make sure you install ATKACPI first or else you will get this message.



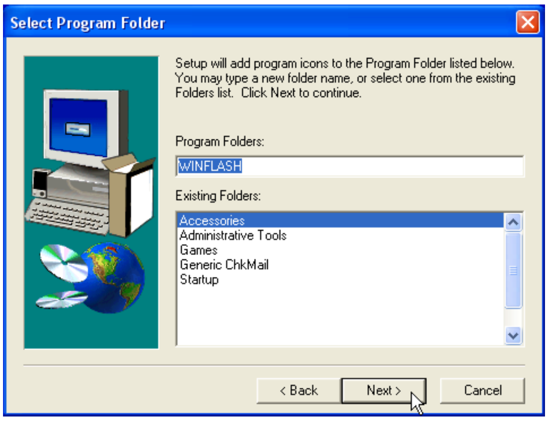
Running setup will give you the following wizard:



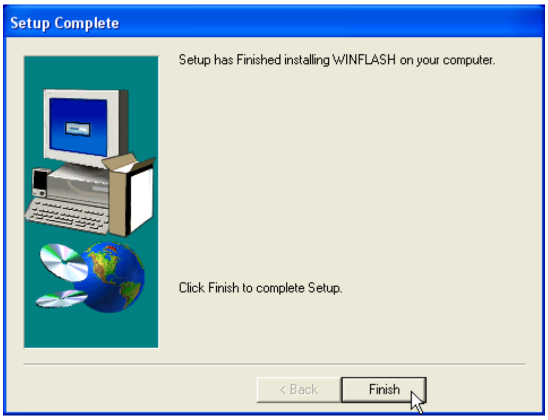
1. On the “Welcome” screen, click **Next** after reading the message.



2. On the “Choose Destination Location” screen, click **Next** to continue or you may first change the destination folder.



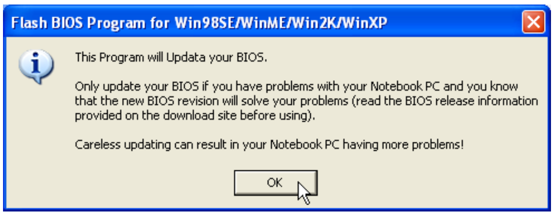
3. On the “Select Program Folder” screen, click **Next** to continue or enter a different folder name.

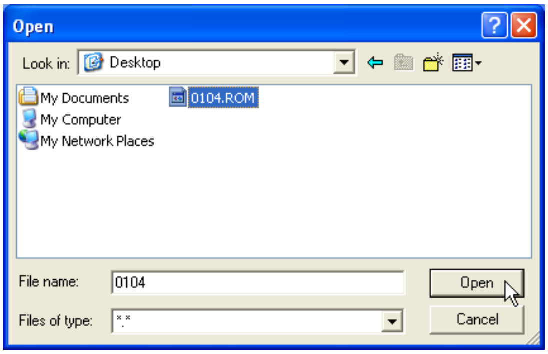


4. On the “Setup Complete” screen, click **Finish**.

Using WINFLASH

WINFLASH is a simple utility to update your Notebook PC's BIOS. To run **WINFLASH**, access the **All Programs** shortcut through the **Start** button.





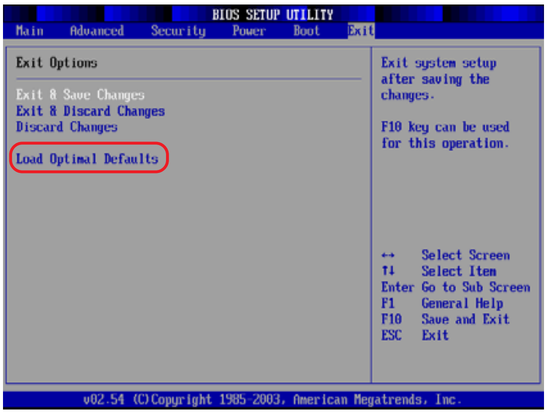
When you enter WINFLASH, you will be immediately asked for the BIOS image file. Browse to the file and click **Open**.

Do not update your BIOS for no reason.

You will be warned that you should only update your BIOS if you know it will solve a specific problem. If you update your BIOS using the wrong BIOS file, your Notebook PC may not boot up.



Text in these screens are examples only and will not reflect your system.



Compare the BIOS ROM (your current BIOS) to the BIOS image (the new BIOS). If this is correct, click **Flash** to write the new BIOS to your Notebook PC. You need to restart your Notebook PC and "reset your BIOS". See instructions on the next page.

You may be instructed to "reset your BIOS". It entails pressing [**F2**] on bootup to enter BIOS setup and selecting **Load Setup Defaults**, and then **Exit Saving Changes** on the "Exit" menu.



GameFace (selected models)

(Utility on selected models)

Topics Covered:

GameFace Utility Setup

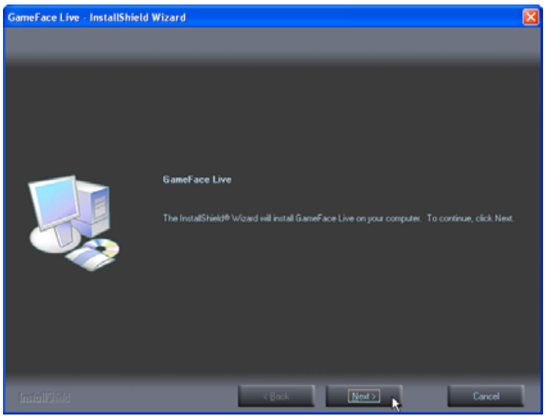
Screens will vary depending on your operating system but the contents should be the same.

GameFace Utility

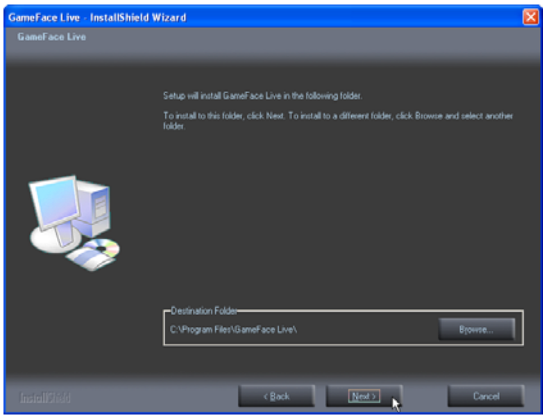
GameFace lets you talk to and see your friend on the remote computer even when you are playing full-screen game.

Installation

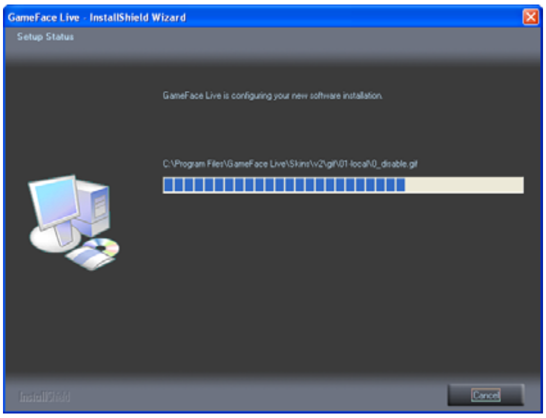
Execute setup.exe. Follow the installation wizard to complete the installation. If you are using Windows 2000, you will need to reboot the system to complete the installation.



Running the setup application will begin analyzing your system.



If the GameFace driver is not found, you will get this message. You must install the GameFace enhanced display driver before installing this utility.



Click **Next** to begin installing the driver.

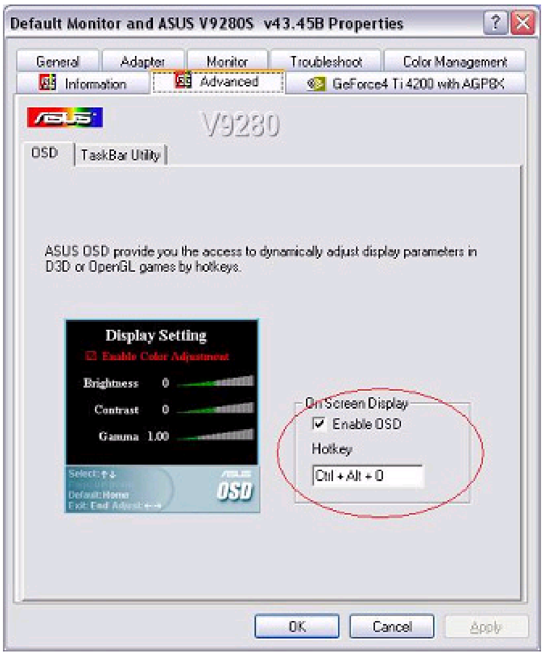


Click **Finish** on the “Setup Complete” screen.

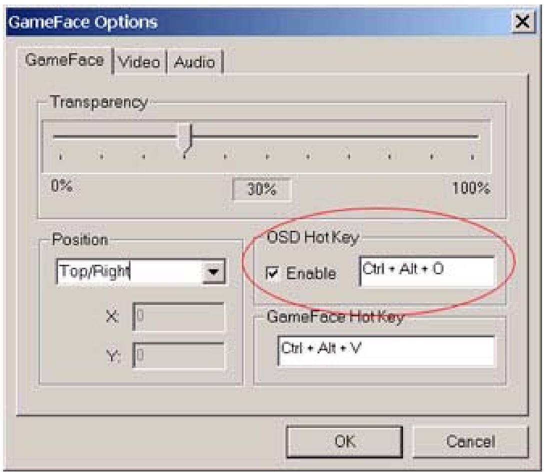
Getting Started

Enable ASUS OSD

1. Open Display Properties dialog from desktop or control panel
2. Press the Advanced button on the Settings page
3. Select the OSD page in the Advanced page
4. Check the Enable OSD check box and input the appropriate hotkey
5. Or we can enable OSD through the GameFace options in GameFace application



Enable OSD from display properties.



Enable OSD from GameFace options.

Launch GameFace

It will use the first Video/Audio WDM capture device it found when the first startup. You can change the Video and Audio input device from the Options in the Tool menu if you have more than one Video/Audio device. But the change will not take effect when you are playing video or connecting to others. You must stop or disconnect to make the change effect.



Local Playback Mode



1. Choose “Local Play/Stop” from the File menu to start local playback while local video is not playing
2. Choose “Local Play/Stop” from the File menu to stop local playback while playing local video
3. You can also press “Play/Stop” button to start or stop local playback

Network Playback Mode



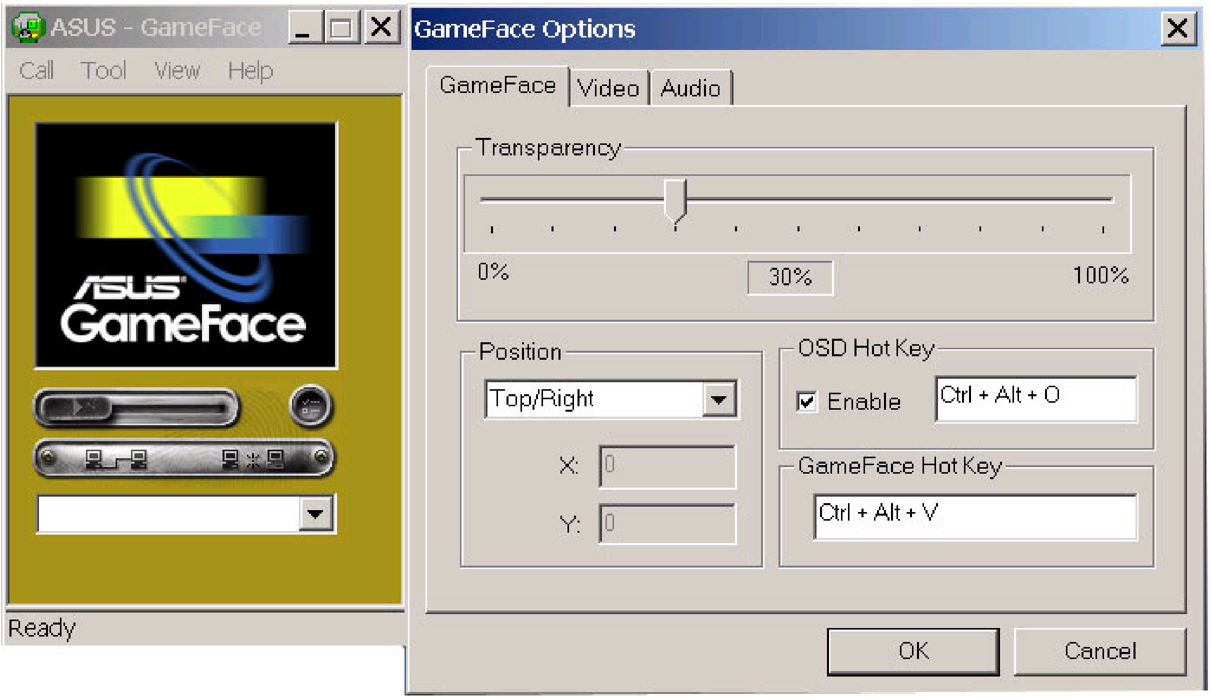
1. Connect to Remote Computer:
2. Input the Computer Name (Local Area Network) or IP Address in the combo box
3. Choose the New Call from the “Call” menu or press the “Make a Call” button
4. You will both see and hear the remote video and audio if remote computer accept the call
5. If you have no idea about your computer name and IP address, you can use “Tool” -> “Info” to get that

Waiting for connection:

1. Launch GameFace
2. GameFace will popup a dialog box to ask you if you want to accept a call from the remote computer
3. Choose the “End Call” from the File menu or press the “End the Call” button to disconnect the connection

GameFace Setting

You can change the Transparency, Position, and Hotkey settings in the GameFace page of GameFace Options Dialog from the Option in the Tool menu.



Launch Game And Show GameFace

Launch the game you want to play. After entering the full-screen mode, press Hotkey (default is Ctrl+Alt+V) to show the GameFace window.



The demo picture is captured from the game “Delta Force: Black Hawk Down”

Enable OSD in Game

Press OSD hotkey to show the OSD. Using Page-Up/Page-Down key to select the GameFace page. Using Arrow Key to select and adjust the items you want to change. (Enable GameFace, Transparency, Position X, Position Y, and Sizing).



The demo picture is captured from the game “Delta Force: Black Hawk Down”

Frequently Asked Questions

1. **The record volume in Windows XP is too low.**

   Many sound cards have an option called “Microphone Boost” or “Mic Boost.” This feature boosts the input volume so that weak input devices can produce stronger inputs. If you determine that the input level from a system is too low for your voice session, you can enable microphone boost.

   To enable microphone boost

   1. Display the recording mixer
   2. Enable the Advanced buttons on the mixer by choosing the Advanced command from the Options menu.
   3. Click the microphone line’s Advanced button to display the microphone’s Advanced Controls dialog box.
   4. Select the Microphone Boost check box.

   If microphone boost makes your input too loud, you can use the same procedure to disable microphone boost. If your sound card does not support microphone boost, one or more of the following will be true. (from Microsoft DirectX document)

   - The Advanced command on the recording mixer’s Options menu will be unavailable.
   - The Advanced button in the recording mixer’s microphone section will be unavailable.
   - The Microphone Boost check box on the Advanced Control dialog box will be unavailable

2. **I cannot show GameFace when using an USB keyboard.**

   Currently, ASUS GameFace and OSD only support PS/2 keyboard.

3. **How do I select a TV channel when using ASUS GameFace and TV Tuner input is selected?**

   ASUS GameFace does not currently support TV channel selection. Please use the ASUS Digital VCR (Ver. 2.5) instead.

4. **The recording sound is noisy when I using the camera’s built-in microphone.**

   It is not recommended to use the camera’s built-in microphone because this kind of microphone is too sensitive. Therefore, you will hear many background noise. It is recommended to use a headphone with a microphone attached, that way the microphone will be close to your mouth.

5. **I can not show the GameFace window in games.**

   You must have an ASUS Display card and install ASUS display driver 43.45D or above. Please check the system requirements in the readme text.

6. **How do I use GameFace when my computer is behind a Firewall?**

   You must have the permission to change firewall settings. Using the port mapping function to map port number from 6050 to 6070 to your computer. For example, assume the virtual IP address of your computer is 192.168.0.3, map port service from 6050 to 6070 to the address 192.168.0.3. If both the remote computer and your computer are under the same firewall, you don’t need to set port mapping. But if the remote computer is behind another firewall, both computers will have to set port mapping.